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2000

1999 ANNUAL
GROUNDWATER REMEDIATION REPORT
JAL #4 PLANT
LEA COUNTY, NEW MEXICO

RECEIVED

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ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

For:

EL PASO ENERGY CORPORATION
1001 LOUISIANA STREET
HOUSTON, TEXAS 77002

February 14, 2000

Prepared By:

**ROBERTS/SCHORNICK
& ASSOCIATES, INC.**

Environmental Consultants
2488 East 81st Street/Suite 610
Tulsa, Oklahoma 74137
(918) 496-0059

RS

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1.0 INTRODUCTION

Roberts/Schornick & Associates, Inc. (RSA) has been retained by El Paso Energy Corporation (EPEC) to compile the 1999 Annual Groundwater Remediation Report for the Jal No. 4 Plant (Plant) located in Lea County, New Mexico. The remedial activities conducted at the Plant have been performed under EPEC's Project Work Plan, dated February 1995. This plan was approved by the New Mexico Oil Conservation Division (OCD) on April 27, 1995, with subsequent revisions approved on August 10, 1995 and July 8, 1997.

The Plant was constructed by an EPEC entity (El Paso Natural Gas Company) in 1952 to treat, compress and transport natural gas to EPEC's main transmission lines. Currently, the Plant is owned and operated by Christie Gas Corporation. The Plant property is comprised of approximately 181 acres of land located west of State Highway 18 approximately 9 miles north of the town of Jal, New Mexico. The location of the Plant property and topographic features are shown on Figure 1. As is shown, the Plant property occupies portions of Sections 31 and 32 of Township 23 South, Range 37 East, and Sections 5 and 6 of Township 24 South, Range 37 East, all in Lea County, New Mexico.

1.1 Program Wells and Sampling Schedule

To assess brine and hydrocarbon impacts to a shallow groundwater system in the Plant area, EPEC has now installed 18 monitor wells, 1 piezometer, and 2 recovery wells on Plant property and adjoining properties to the east (located hydraulically downgradient). Of these wells, EPEC has designated fourteen (14) monitor wells as "***program monitor wells***" that are frequently sampled and analyzed for mineral composition, organic compounds, and metal analytes. The locations of these program monitor wells are shown on Figures 2 through 7.

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It should be noted that EPEC installed one (1) additional downgradient monitor well, ACW-17, in the southeast corner of the study area in October 1999. A "Summary of Field Activities", prepared by Highlander Environmental Corp., is presented in Appendix A that describes the installation of this monitor well. Monitor wells ACW-15 and ACW-16 have now been designated as recovery wells RW-1 and RW-2, respectively.

A list of EPEC's program monitor wells and the sample collection schedule for each well is as follows:

Monitor Well	Sampled Quarterly	Sampled Annually
ACW-1		x
ACW-2A		x
ACW-4		x
ACW-5		x
ACW-6		x
ACW-7		x
ACW-8		x
ACW-9		x
ACW-10		x
ACW-11		x
ACW-12	x	x
ACW-13	x	x
ACW-14	x	x
ACW-17	x	x

Quarterly groundwater samples collected from these wells during the 1999 monitoring program were submitted to the laboratory for the following analyses: benzene, toluene, ethylbenzene, and total xylenes (collectively referred to as BTEX), total dissolved solids (TDS), and the major cations and anions (including boron, bromide, calcium, chloride, copper, fluoride, iron, magnesium, manganese, nitrate, potassium, silica, sodium, sulfate, zinc and alkalinity).

Annual groundwater samples collected from these wells during the 1999 monitoring program were submitted to the laboratory for the following analyses: BTEX, TDS, and the major cations and anions (including boron, bromide, calcium, chloride, copper, fluoride, iron, magnesium, manganese, nitrate, potassium, silica, sodium, sulfate, zinc, and alkalinity).

1.2 Non-Program Wells and Sampling Schedule

In addition to these program monitor wells, EPEC also collects groundwater samples from three (3) monitor wells (ENSR-1, ENSR-2 and ENSR-3) one (1) piezometer (PTP-1), one (1) upgradient water supply well (EPNG-1), and two (2) downgradient active water supply wells (Oxy Production Well and Doom Production Well). The ENSR monitor wells are located within the Plant process areas as shown on Figures 2 through 7. Water supply well EPNG-1 is located at the northwest corner of the Plant property. The Oxy Production Well is located approximately in the center of Section 5-T24S-R37E and provides potable water to Oxy's Myers Langlie Mattix Unit Water Injection Station. The locations of the Oxy injection station and supply well are shown on Figures 2 through 7. The Doom Production Well is a private water supply well that provides water to the residence of Jimmie J. and Rebecca J. Doom, and is located in the approximate center of the southeast quarter of Section 5-T24S-R37E. The location of the Doom Production Well is not shown on the Figures provided, however, the well is approximately 2,500 feet southeast of the Oxy water injection station.

To date, EPEC has collected groundwater samples from these non-program wells at least annually. With the exception of the Doom Production Well, the groundwater samples taken from these non-program wells are being submitted to the laboratory for the following analyses: BTEX, TDS, specific conductance, and chloride. The samples taken from the Doom Production Well are being submitted to the laboratory for the following analyses: BTEX, TDS, specific conductance, pH, and the major cations and anions (including boron, bromide, calcium, chloride, copper, fluoride, iron, magnesium, manganese, nitrate, potassium, silica, sodium, sulfate, zinc, and alkalinity).

1.3 Depth to Groundwater Measurements

During each groundwater sampling event, and prior to disturbing the water columns within each well, EPEC personnel measured the static depths to groundwater within the well casings using an electronic water level indicator. All depths to groundwater were measured relative to the surveyed top of casing (TOC) datums so that groundwater

elevations could be determined. Table 1 provides a summary of the depths to groundwater, TOC elevations, and groundwater elevations that have been compiled throughout EPEC's monitoring program.

1.4 Sampling Procedures

The groundwater samples were collected by EPEC personnel in accordance with EPA methods and quality assurance/quality control. All monitor wells were purged thoroughly prior to sample collection using electric submersible pumps. Groundwater produced during purging operations was contained and disposed of properly within the Plant's lined surface impoundments.

Samples were collected in laboratory-prepared containers, labeled as to source, packed in ice, and placed under chain-of-custody control for transfer to the laboratory. Samples collected during each of the 1999 sampling events were submitted to NEL Laboratories, Inc. (Las Vegas, Nevada). The results of the 1999 groundwater analyses and all previous analyses are summarized on Table 2. The complete 1999 laboratory analytical reports and chain-of-custody documents are provided in Appendix B.

It should be noted that the groundwater samples taken from monitor well ACW-14 throughout the 1999 sampling events were inadvertently labeled and submitted to the laboratories as "ACW-15". RSA has corrected this error on the data summary tables and figures provided herein, however, the laboratory analytical reports and chain-of-custody documents were not changed.

2.0 RESULTS OF MONITORING ACTIVITIES

The following sections summarize the field measurements and laboratory analytical results obtained throughout the 1999 groundwater sampling program. These data, where appropriate, are compared with historic data to assess any trends that may be apparent. Thirty-nine (39) trend graphs have been prepared that show the TDS, chloride/sodium, and benzene concentrations that have been detected within the groundwater samples taken from the thirteen (13) previously existing program monitor wells (i.e., no graph was prepared for the newly installed monitor well ACW-17). These graphs are presented in the section tabbed "Graphs".

2.1 Field Measurements

Depth to groundwater measurements that have been taken during the sampling events are shown on Table 1. These data indicate that the depths to groundwater across the Site are approximately 100 feet below ground surface, and that the saturated thickness of the groundwater system exhibits little variability. In fact, the fluctuations in the groundwater elevations observed in most wells have been less than one (1) foot since monitoring began in 1997.

Groundwater potentiometric surface maps have been prepared from these data for each sampling quarter. These maps are presented on Figures 2 through 5. As is shown on these figures, the groundwater flow direction across the Site is from northwest to southeast (S46E). The hydraulic gradient across the Site is approximately 0.002 feet per foot. Both groundwater flow direction and hydraulic gradient appear to have changed little since 1997.

2.2 Inorganic Constituents

The primary inorganic parameters that are being used to assess plume migration at the Site include: TDS, chloride and sodium. RSA has reviewed the concentration trend graphs for these parameters in each of the program monitor wells. It is RSA's opinion, based upon our review, that certain trends are apparent in the levels of these parameters. The following table summarizes RSA's opinions of the trends that are observable from the inorganic database provided herein.

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MONITOR WELL	CONCENTRATION TRENDS		
	TDS	CHLORIDE	SODIUM
ACW-1	▲	▲	●
ACW-2A	▼	▼	●
ACW-4	▼	●	▲
ACW-5	▼	▼	●
ACW-6	●	●	●
ACW-7	●	▲	▲
ACW-8	▼	▼	●
ACW-9	●	●	●
ACW-10	▲	●	●
ACW-11	●	▲	▲
ACW-12	▲	▲	▲
ACW-13	▼	●	●
ACW-14	●	●	●

Key: ● denotes no observable trend, ▼ denotes a decreasing trend, ▲ denotes an increasing trend

In general, these trends indicate that the levels of inorganic constituents are stable in nine (9) wells, and are increasing slightly in four (4) wells (including monitor wells ACW-01, ACW-7, ACW-11 and ACW-12).

On Figure 6, RSA has prepared an isopleth of the chloride concentrations detected in groundwater during the 1999 sampling program. On this isopleth, the value posted at each well location represents the highest chloride concentration detected in any groundwater sample taken from that well during the 1999 monitoring program.

2.3 Organic Constituents

The primary inorganic constituent that is being used to assess plume migration at the Site is benzene. RSA has reviewed the concentration trend graphs for benzene concentrations in each of the program monitor wells. It is RSA's opinion, based upon our review, that

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certain trends are apparent in the levels of this compound. The following table summarizes RSA's opinions of the trends that are observable from the benzene database provided herein.

MONITOR WELL	BENZENE CONCENTRATION TREND
ACW-1	▲
ACW-2A	▼
ACW-4	▲
ACW-5	▼
ACW-6	▲
ACW-7	●
ACW-8	▼
ACW-9	●
ACW-10	▼
ACW-11	▲
ACW-12	▲
ACW-13	●
ACW-14	●

Key: ● denotes no observable trend, ▼ denotes a decreasing trend, ▲ denotes an increasing trend

In general, these trends indicate that benzene levels are remaining constant or may be increasing slightly across the Site. Of particular interest are the slightly increasing benzene trends indicated in wells ACW-1, ACW-4 and ACW-11, located along the eastern Plant property boundary, and in leading-edge wells ACW-6 and ACW-12.

On Figure 7, RSA has prepared an isopleth of the benzene concentrations detected in groundwater during the 1999 sampling program. On this isopleth, the value posted at each well location represents the highest benzene concentration detected in any groundwater sample taken from that well during the 1999 monitoring program.

3.0 GROUNDWATER REMEDIATION SYSTEM

To date, EPEC has installed two (2) groundwater recovery wells to mitigate impacts to the shallow groundwater system. These wells are identified as RW-1 and RW-2, and the locations of these wells are shown on Figures 2 through 7. As is shown on these figures, RW-1 is located on Plant property in an area that has likely been a source for brines and hydrocarbons. RW-2 is located downgradient approximately 780 feet east of the Plant property boundary. EPEC has also installed a below-grade pipeline that connects recovery wells RW-1 and RW-2 to a Class II water injection well located immediately north of the Plant in the northwest quarter of the southwest quarter of Section 32-T23S-R37E. This injection well is currently owned by Christie Gas Corporation. During 1999, EPEC entered into an agreement with Christie Gas Corporation providing EPEC access to dispose of groundwater within a Class II disposal owned by Christie Gas Corporation located immediately north of the Jal No. 4 Plant.

Electrical power was established at recovery well RW-1 during 1998, and at recovery well RW-2 in 1999. EPEC is currently contracted with Southwestern Public Service Company (Hobbs, New Mexico) to provide electrical power to the groundwater recovery system. Groundwater recovery began from recovery well RW-1 in October 1999, and from RW-2 in January 2000. Table 3 provides a summary of the volumes of groundwater pumped from each of the recovery wells during 1999 and January 2000. During 1999, recoveries from RW-1 totaled 319,280 gallons, averaging 106,426 gallons per month. During January 2000, the initial recoveries from RW-2 totaled 159,650 gallons. These initial recovery data indicate that the monthly recovery volumes from the system will be approximately 266,000 gallons.

4.0 CONCLUSIONS

Based upon RSA's review of the data presented herein, the following conclusions are presented:

- The uppermost occurrence of groundwater in the Site area occurs within a shallow groundwater system with saturations occurring at approximately 100 feet below ground surface.
- The saturated thickness of the shallow groundwater system is locally very stable fluctuating less than 1-foot over the last three (3) years.
- Groundwater flow directions at the Site within the shallow groundwater system appear quite stable with flows occurring from northwest to southeast (S46E) and a hydraulic gradient of approximately 0.002 feet per foot.
- The shallow groundwater system in the area has been impacted by chloride. These data indicate that a plume containing elevated levels of chloride has migrated downgradient from the Plant area.
- In general, chloride concentrations in groundwater appear to be increasing slightly along the eastern property boundary of the Plant, and along a line between RW-1 and the newly installed monitor well ACW-17.
- The shallow groundwater system in the area has also been impacted by benzene. These data indicate that a plume containing levels of benzene has migrated downgradient from the Plant area.
- In general, benzene concentrations in groundwater appear to be remaining constant or may be increasing slightly along the eastern property boundary of the Plant. The analytical data from the last sampling event in 1999 indicate that the newly installed monitor well ACW-17 is located in close proximity of the leading edge of the benzene plume.

5.0 RECOMMENDATIONS

RSA recommends that the groundwater remediation system continue to be operated at its maximum design capacity. In addition to the quarterly groundwater monitoring activities described above, each recovery well should be routinely monitored to identify groundwater recovery volumes, pumping rates, pumping times, and the quality of groundwater being discharged (via field measurements of specific conductance and chloride concentrations). Concurrent depth to groundwater measurements should also be taken periodically within both the recovery and monitoring wells during periods of prolonged pumping to assess the cones of depression created by groundwater removal. When an adequate volume of dynamic head data are accumulated for the groundwater system, EPEC should conduct a capture zone analysis to assess the effects of the current recovery well configuration.

TABLES

**TABLE 1: SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS,
JAL NO. 4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO**

MONITOR WELL	SCREENED INTERVAL (FEET-BGL)	TOP OF CASING ELEVATION (FEET-AMSL)	DEPTH TO GROUNDWATER MEASUREMENT DATE	DEPTH TO GROUNDWATER (FEET-TOC)	GROUNDWATER ELEVATION (FEET-AMSL)
ACW-01	110 to 130	3,300.87	02/19/97	106.65	3194.22
			05/07/97	105.59	3195.28
			08/19/97	105.61	3195.26
			10/21/97	105.71	3195.16
			02/24/98	105.62	3195.25
			05/12/98	105.59	3195.28
			08/11/98	105.61	3195.26
			10/20/98	105.67	3195.20
			02/23/99	105.72	3195.15
			05/11/99	105.66	3195.21
			08/11/99	105.68	3195.19
ACW-2a	98 to 118	3,300.88	05/12/99	106.00	3194.88
			10/18/99	106.09	3194.79
ACW-05	105 to 115	3,294.75	02/19/97	103.08	3191.67
			05/07/97	103.06	3191.69
			08/19/97	103.07	3191.68
			10/22/97	103.06	3191.69
			02/24/98	103.10	3191.65
			05/13/98	103.10	3191.65
			08/11/98	103.15	3191.60
			10/21/98	103.22	3191.53
			02/23/99	103.26	3191.49
			05/13/99	103.17	3191.58
			08/11/99	103.17	3191.58
			10/21/99	103.25	3191.50
ACW-06	110 to 120	3,300.53	02/19/97	107.53	3193.00
			05/08/97	107.50	3193.03
			08/18/97	107.51	3193.02
			10/22/97	107.57	3192.96
			02/24/98	107.54	3192.99
			05/13/98	107.55	3192.98
			08/11/98	107.57	3192.96
			10/21/98	107.70	3192.83
			02/23/99	107.68	3192.85
			05/13/99	107.62	3192.91
			08/11/99	107.60	3192.93
			10/21/99	107.68	3192.85
ACW-7	105 to 115	3,295.36	05/12/99	102.62	3192.74
			10/21/99	102.75	3192.61
ACW-8	140 to 173	3,297.27	05/11/99	104.17	3193.10
			10/18/99	104.29	3192.98
ACW-09	140 to 160	3,302.47	02/19/97	110.24	3192.23
			05/08/97	110.25	3192.22
			08/19/97	110.26	3192.21
			10/23/97	110.28	3192.19
			02/24/98	110.29	3192.18
			05/13/98	110.30	3192.17
			08/11/98	110.32	3192.15
			10/21/98	110.40	3192.07
			02/23/99	110.54	3191.93
			05/13/99	110.45	3192.02
			08/11/99	110.45	3192.02
ACW-10	140 to 160	3,297.57	10/22/99	110.50	3191.97
			02/19/97	106.31	3191.26
			05/08/97	106.32	3191.25
			08/19/97	106.33	3191.24
			10/23/97	106.35	3191.22
			02/24/98	106.38	3191.19
			05/14/98	106.38	3191.19
			08/11/98	106.41	3191.16
			10/22/98	106.54	3191.03
			02/23/99	106.52	3191.05

**TABLE 1: SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS,
JAL NO. 4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO**

MONITOR WELL	SCREENED INTERVAL (FEET-BGL)	TOP OF CASING ELEVATION (FEET-AMSL)	DEPTH TO GROUNDWATER MEASUREMENT DATE	DEPTH TO GROUNDWATER (FEET-TOC)	GROUNDWATER ELEVATION (FEET-AMSL)
ACW-10 cont.	140 to 160	3,297.57	05/14/99	106.45	3191.12
			08/11/99	106.47	3191.10
			10/22/99	106.52	3191.05
ACW-11	140 to 160	3,299.33	02/19/97	106.01	3193.32
			05/06/97	105.95	3193.38
			08/19/97	106.00	3193.33
			10/21/97	106.02	3193.31
			02/24/98	106.02	3193.31
			05/12/98	106.00	3193.33
			08/11/98	106.07	3193.26
			10/20/98	106.17	3193.16
			02/23/99	106.20	3193.13
			05/12/99	106.07	3193.26
			08/11/99	106.15	3193.18
			10/20/99	106.16	3193.17
ACW-12	150 to 170	3,299.56	02/19/97	109.32	3190.24
			05/08/97	109.32	3190.24
			08/20/97	99.29	3200.27
			10/23/97	109.39	3190.17
			02/24/98	109.38	3190.18
			05/14/98	109.35	3190.21
			08/11/98	109.40	3190.16
			10/22/98	109.51	3190.05
			02/23/99	109.54	3190.02
			05/14/99	109.44	3190.12
			08/11/99	109.54	3190.02
			10/22/99	109.52	3190.04
ACW-13	153 to 173	3,289.46	02/20/97	99.28	3190.18
			05/08/97	99.29	3190.17
			08/20/97	99.29	3190.17
			10/23/97	99.27	3190.19
			02/24/98	99.31	3190.15
			05/14/98	99.31	3190.15
			08/11/98	99.36	3190.10
			10/22/98	99.40	3190.06
			02/23/99	99.45	3190.01
			05/14/99	99.38	3190.08
			08/11/99	99.44	3190.02
			10/22/99	99.44	3190.02
ACW-14	157 to 177	3,291.18	02/19/97	NM	NM
			05/06/97	NM	NM
			08/20/97	100.41	3190.77
			10/22/97	100.38	3190.80
			02/24/98	100.47	3190.71
			05/13/98	100.42	3190.76
			08/11/98	100.47	3190.71
			10/21/98	100.54	3190.64
			02/23/99	100.57	3190.61
			05/13/99	100.49	3190.69
			08/09/99	100.49	3190.69
			10/21/99	100.55	3190.63
ACW-17	150 to 170	3,290.54	10/23/99	102.39	3188.15

NOTES:

1. TOC : Top of Casing
2. AMSL : Above Mean Sea Level
3. NM : No Measurement Taken
4. BGL: Below Ground Level

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Benzene, µg/l	Toluene, µg/l	Ethylbenzene, µg/l	Total Xylene, µg/l	Gasoline Range Organics, mg/l	Acenaphthene, µg/l	Acenaphthylene, µg/l	Anthracene, µg/l	Benz(a)anthracene, µg/l	Benz(b)fluoranthene, µg/l	Benz(k)fluoranthene, µg/l	Benzo(g,h,i)perylene, µg/l	Benzo(a)pyrene, µg/l	Chrysene, µg/l	Dibenzo(a,h)anthracene, µg/l	Fluoranthene, µg/l	Fluorene, µg/l	Indeno(1,2,3-cd)pyrene, µg/l	Naphthalene, µg/l	Phenanthrene, µg/l	Pyrene, µg/l
ACW #01	ACW #01	05-Mar-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	15-Sep-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	10-Nov-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	20-Apr-94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	27-Oct-94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	16-May-95	<5	<10	<5	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	27-Jun-95	4.6	<2.5	<2.5	140	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	29-Aug-95	6	<10	<5	<15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	06-Feb-96	6.1	3	1.9	2.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	06-Feb-96	5.6	2.7	3	<7.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	08-May-96	6.3	2.03	<1.0	<3.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	13-Aug-96	3.5	1.2	<1.0	<2.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	05-Nov-96	5.6	2.5	<1.0	1.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	06-May-97	14	15	<5.0	5.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	21-Nov-97	6.1	4.8	<0.5	2.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	21-Nov-97	6.7	5.7	<0.5	2.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01D	ACW #01D	12-May-98	6.8	11	4.4	3.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0170	ACW #01	20-Oct-98	7	4	<2 Jm	<2 Jm	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0458	ACW #01	11-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0005	ACW #01	19-Oct-99	7.5	3.6	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0187	ACW #01	08-May-97	140	100	<50	<100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #02A	ACW #02A	20-Oct-97	89	100	13	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #02A	ACW #02A	11-May-98	120	210	20	33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #02A	ACW #02A	19-Oct-98	180	340	38	72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #02A	ACW #02A	12-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0013	ACW #02A	18-Oct-99	17 P	42 P	8.1 P	14 P	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #03	ACW #03	06-May-97	350	22	110	43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #03	ACW #03	20-Oct-97	160	8.2	69	32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0157	ACW #03	11-May-98	130	21	41	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0456	ACW #03	19-Oct-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0011	ACW #03	12-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0185	ACW #03	19-Oct-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #04	ACW #04	06-May-97	29	12	<5.0	<10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #04	ACW #04	20-Oct-97	170	150	<5.0	110	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0168	ACW #04	12-May-98	190	170	60	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0454	ACW #04	19-Oct-98	190	140	49	90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0012	ACW #04	12-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0184	ACW #04	19-Oct-99	240	160	44	81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES, JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
ACW #01	ACW #01	05-Mar-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	15-Sep-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	10-Nov-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	20-Apr-94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	27-Oct-94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	16-May-95	—	72	0.062	—	—	—	12	33	—	2,600	—	<0.020	700	—	—	—	470
ACW #01	ACW #01	27-Jun-95	—	92	0.077	—	—	—	15	35	—	3,200	—	<0.02	710	—	—	—	510
ACW #01	ACW #01	29-Aug-95	—	78	0.069	—	—	—	11	28	—	2,400	—	<0.02	820	—	—	—	590
ACW #01	ACW #01	06-Feb-96	—	100	0.069	—	—	—	16	36	—	4,300	—	<0.010	830	—	—	—	620
ACW #01	ACW #01	06-Feb-96	—	102	0.1	—	—	—	17	41	—	3,900	—	<0.1	799	—	—	—	630
ACW #01	ACW #01	08-May-96	—	118	0.09	—	—	—	18	54	—	3,070	—	<0.05	310	—	—	—	718
ACW #01	ACW #01	13-Aug-96	—	100	0.078	—	—	—	8.6	41	—	2,400	—	0.008	730	—	—	—	690
ACW #01	ACW #01	05-Nov-96	—	98	0.062	—	—	—	11	16	—	3,000	—	0.011	810	—	—	—	610
ACW #01	ACW #01	06-May-97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #01	ACW #01	21-Nov-97	—	110	0.06	—	—	—	20	14	—	3,900	—	0.04	680	—	—	—	—
ACW #01D	ACW #01D	21-Nov-97	—	100	0.07	—	—	—	20	13	—	4,000	—	0.03	670	—	—	—	—
S98-0170	ACW #01	12-May-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0458	ACW #01	20-Oct-98	—	110	0.062	—	—	—	16	15	—	3,800	—	<0.05	840	840	<25	<25	700
M99-0005	ACW #01	11-May-99	<0.005	110	0.13	<0.0002	0.013	<0.02	13	24	<0.005	3,100	<0.005	<0.05	780	780	<25	<25	870
M99-0187	ACW #01	19-Oct-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #02A	ACW #02A	06-May-97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #02A	ACW #02A	20-Oct-97	—	<1	<0.01	—	—	—	12	10	—	6,000	—	<0.02	2,200	—	—	—	—
S98-0167	ACW #02A	11-May-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0455	ACW #02A	19-Oct-98	—	0.96	<0.0025	—	—	—	12	12	—	6,400	—	<0.05	2,400	1500	860	<25	11
M99-0013	ACW #02A	12-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0181	ACW #02A	18-Oct-99	<0.005	1.1	0.0041	0.00051	0.085	0.041	14	26	<0.005	6,100	0.037	<0.05	2,700	1700	990	<50	15
ACW #03	ACW #03	06-May-97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #03	ACW #03	20-Oct-97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0157	ACW #03	11-May-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0456	ACW #03	19-Oct-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0011	ACW #03	12-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0185	ACW #03	19-Oct-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #04	ACW #04	06-May-97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #04	ACW #04	20-Oct-97	—	360	6.1	—	—	—	250	13	—	33,000	—	<0.02	500	—	—	—	—
S98-0168	ACW #04	12-May-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0454	ACW #04	19-Oct-98	—	370	7.0	—	—	—	170	10	—	37,000	—	<0.05	480	480	<25	<25	3100
M99-0012	ACW #04	12-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0184	ACW #04	19-Oct-99	<0.005	370	12	<0.0002	0.0076	<0.02	170	14	<0.005	42,000	0.14	<0.05	500	500	<25	<25	3200

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/L	Sulfate, mg/L	pH Temperature °C	Bromide, mg/L	Fluoride, mg/L	Nitrate-N, mg/L	Nitrate as NO ₃ , mg/L	Aluminum, mg/L	Arsenic, mg/L	Barium, mg/L	Boron, mg/L	Cadmium, mg/L	Calcium, mg/L	Chromium, mg/L	Cobalt, mg/L	Copper, mg/L	Iron, mg/L
ACW #05	ACW #05	10-Mar-93	10,400	---	6,110	2,544	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	17-Jun-93	4,480	---	323	1,228	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	16-Sep-93	4,140	---	3,064	650	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	09-Nov-93	4,390	---	3,202	720	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	21-Apr-94	4,131	---	3,300	800	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	28-Oct-94	4,500	---	3,112	550	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	31-Jan-95	4,050	---	2,848	499	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	16-May-95	3,900	7.0	2,800	530	1,100	---	1.3	<1.0	3.5	---	---	---	---	---	---	270	---	---	<0.025	0.46
ACW #05	ACW #05	27-Jun-95	3,800	7.3	2,800	460	800	---	1.1	<1.0	3.4	---	---	---	---	---	---	270	---	---	<0.025	0.34
ACW #05	ACW #05	30-Aug-95	3,900	7.0	2,700	510	890	---	---	<1.0	<2.0	---	---	---	---	---	---	240	---	---	<0.025	<0.10
ACW #05	ACW #05	06-Feb-96	3,800	7.5	2,200	510	920	---	0.92	0.12	4.7	---	---	---	---	---	---	240	---	---	<0.006	1.5
ACW #05	ACW #05	06-Feb-96	3,090	7.3	2,745	506	835	---	<1.25	0.29	4.9	---	---	---	---	---	---	240	---	---	<0.1	2
ACW #05	ACW #05	08-May-96	3,650	7.2	2,460	519	653	---	4.5	0.42	5	---	---	---	---	---	---	167	---	---	0.01	0.2
ACW #05	ACW #05	13-Aug-96	3,400	7.3	2,500	500	710	---	1	0.7	5.4	---	---	---	---	---	---	200	---	---	<0.006	0.024
ACW #05	ACW #05	06-Nov-96	3,300	7.5	2,300	500	710	---	1.2	0.57	<0.05	---	---	---	---	---	---	180	---	---	<0.007	0.3
ACW #05	ACW #05	07-May-97	3,020	---	2,000	430	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	22-Oct-97	3,160	7.7	2,000	470	320	---	1.7	0.6	6	---	---	---	---	---	---	170	---	---	<0.01	0.5
ACW #05	ACW #05	13-May-98	3,100	---	2,800	570	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	21-Oct-98	2,930	---	1,910	440	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	13-May-99	3,190	---	1,960	450	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	21-Oct-99	3,250	7.23	1,890	1,000	440	18.5	<2	0.77	6.5	---	0.094	0.0061	0.034	1.1	<0.002	190	0.019	<0.005	<0.0025	0.15
ACW #06	ACW #06	18-Jun-93	8,220	---	5,027	2,108	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06	ACW #06	16-Sep-93	11,130	---	6,656	2,737	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06	ACW #06	08-Nov-93	8,540	---	5,646	2,154	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06	ACW #06	21-Apr-94	11,080	---	6,930	3,600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06	ACW #06	28-Oct-94	11,988	---	6,910	2,100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06	ACW #06	31-Jan-95	11,530	---	6,755	2,873	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06	ACW #06	16-May-95	10,000	8.1	6,400	2,800	110	---	1.4	31	<2.0	---	---	---	---	0.9	---	70	---	---	<0.025	3.9
ACW #06	ACW #06	27-Jun-95	10,000	9.0	8,600	3,500	110	---	1.8	44	<2.0	---	---	---	---	1.1	---	84	---	---	<0.025	5.8
ACW #06	ACW #06	29-Aug-95	12,000	8.4	7,100	3,000	110	---	1.8	26	<2.0	---	---	---	---	0.9	---	42	---	---	<0.025	0.54
ACW #06	ACW #06	06-Feb-96	11,000	8.0	6,600	2,600	72	---	1.3	3.8	<0.0071	---	---	---	---	1.1	---	91	---	---	<0.006	4.6
ACW #06	ACW #06	06-Feb-96	10,320	7.8	5,630	3,180	79	---	1.52	10	<1.25	---	---	---	---	1.3	---	76	---	---	<0.1	5
ACW #06	ACW #06	08-May-96	10,620	7.7	6,460	2,880	48	---	<1.25	6.4	<1.25	---	---	---	---	1.3	---	35	---	---	0.02	4.1
ACW #06	ACW #06	14-Aug-96	11,000	7.9	7,100	2,900	88	---	1.8	21	<0.05	---	---	---	---	1.2	---	85	---	---	<0.006	4.5
ACW #06	ACW #06	06-Nov-96	12,000	8.6	7,700	3,400	74	---	1.3	18	<0.05	---	---	---	---	1.2	---	98	---	---	<0.007	5.3
ACW #06	ACW #06	06-Nov-96	12,000	8.6	7,700	3,600	62	---	1.3	18	<0.05	---	---	---	---	1.1	---	88	---	---	<0.007	4
ACW #06	ACW #06	08-May-97	8,450	---	5,500	2,300	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06	ACW #06	22-Oct-97	10,200	8.2	6,500	2,900	100	---	3	16.5	<0.05	---	---	---	---	0.9	---	68	---	---	<0.01	2.6
ACW #06D	ACW #06D	22-Oct-97	10,700	8.3	6,200	2,900	98	---	3	17.2	<0.05	---	---	---	---	0.9	---	68	---	---	<0.01	2.3
S98-0181	ACW #06	13-May-98	12,000	---	10,000	3,300	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Benzene, ug/l	Toluene, ug/l	Ethylbenzene, ug/l	Total Xylene, ug/l	Gasoline Range Organics, mg/l	Acenaphthene, ug/l	Acenaphthylene, ug/l	Anthracene, ug/l	Benzo(a)anthracene, ug/l	Benzo(b)fluoranthene, ug/l	Benzo(k)fluoranthene, ug/l	Benzo(g,h,i)perylene, ug/l	Benzo(a)pyrene, ug/l	Chrysene, ug/l	Dibenz(a,h)anthracene, ug/l	Fluoranthene, ug/l	Fluorene, ug/l	Indeno(1,2,3-cd)pyrene, ug/l	Naphthalene, ug/l	Phenanthrene, ug/l	Pyrene, ug/l
S98-0469	ACW #08	21-Oct-88	11	6	3	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0019	ACW #06	13-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0195	ACW #06	21-Oct-99	<20	<20	<20	<40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #07	ACW #07	07-May-97	7.3	2.5	3.1	1.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #07	ACW #07	22-Oct-97	6.4	3.4	3	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0182	ACW #07	13-May-98	7.0	3.2	2.1*	1.7*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0467	ACW #07	21-Oct-88	8	3	2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0017	ACW #07	12-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0194	ACW #07	21-Oct-99	7.2	5.3	2.4	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #08	ACW #08	08-May-97	89	10	4.1	3.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #08	ACW #08	21-Nov-97	36	3.9	2	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0173	ACW #08	12-May-98	37	4.5	2.9	1.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0459	ACW #08	20-Oct-98	140	13	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0010	ACW #08	11-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0186	ACW #08	19-Oct-99	32	6.2	3.7	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	17-Jun-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	14-Sep-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	09-Nov-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	22-Apr-94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	01-Dec-94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	31-Jan-95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	17-May-95	<5	22	<5	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	28-Jun-95	<2.5	<2.5	<2.5	<5.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	30-Aug-95	<5	<10	<5	<15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	07-Feb-96	1.8	<1.0	<1.0	<2.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	07-Feb-96	<2.5	<2.5	<2.5	<7.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	08-May-96	<1.0	<1.0	<1.0	<3.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	14-Aug-96	1.4	1.6	<1.0	<2.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	07-Nov-96	2.3	2.2	<1.0	<2.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	19-Feb-97	1.3	4.0	10	4.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	08-May-97	2.6	2.6	1.4	1.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	23-Oct-97	<0.5	<0.5	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	13-May-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0472	ACW #09	21-Oct-98	6	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0022	ACW #09	13-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0198	ACW #09	22-Oct-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #10	ACW #10	18-Jun-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #10	ACW #10	14-Sep-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #10	ACW #10	09-Nov-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #10	ACW #10	22-Apr-94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES, JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
S98-0469	ACW #06	21-Oct-98	—	23	0.099	—	—	—	2.7	22	—	2,640	—	<0.05	1,600	1,600	<25	<25	250
M99-0019	ACW #06	13-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0195	ACW #06	21-Oct-99	<0.005	19	0.087	<0.0002	0.080	0.030	2.3	29	<0.005	2,900	<0.005	<0.05	1,500	1,400	130	<25	250
ACW #07	ACW #07	07-May-97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #07	ACW #07	22-Oct-97	—	80	0.2	—	—	—	3	18	—	2,500	—	<0.2	730	—	—	—	—
S98-0182	ACW #07	13-May-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0467	ACW #07	21-Oct-98	—	91	0.15	—	—	—	4.3	23	—	3,100	—	<0.05	830	830	<25	<25	920
M98-0017	ACW #07	12-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0194	ACW #07	21-Oct-99	<0.005	93	0.13	<0.0002	0.025	<0.02	3.8	23	<0.005	3,300	<0.005	<0.05	870	870	<25	<25	1000
ACW #08	ACW #08	06-May-97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #08	ACW #08	21-Nov-97	—	210	2.2	—	—	—	57	19	—	9,300	—	<0.02	520	—	—	—	—
S98-0173	ACW #08	12-May-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0459	ACW #08	20-Oct-98	—	200	1.7	—	—	—	46	19	—	11,000	—	<0.05	430	430	<25	<25	1,700
M99-0010	ACW #08	11-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0186	ACW #08	19-Oct-99	<0.005	230	2.4	<0.0002	0.031	<0.02	99	16	<0.005	12,000	0.048	<0.05	490	490	<25	<25	2,300
ACW #09	ACW #09	17-Jun-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	14-Sep-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	09-Nov-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	22-Apr-94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	01-Dec-94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	31-Jan-95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	17-May-95	—	280	1	—	—	—	16	49	—	910	—	0.025	320	—	—	—	4,500
ACW #09	ACW #09	28-Jun-95	—	250	0.98	—	—	—	15	51	—	1,000	—	<0.020	300	—	—	—	2,700
ACW #09	ACW #09	30-Aug-95	—	220	0.88	—	—	—	14	43	—	880	—	<0.040	240	—	—	—	2,000
ACW #09	ACW #09	07-Feb-96	—	180	0.71	—	—	—	14	47	—	810	—	<0.010	300	—	—	—	2,200
ACW #09	ACW #09	07-Feb-96	—	175	0.7	—	—	—	16	56	—	810	—	<0.1	291	—	—	—	2,220
ACW #09	ACW #09	08-May-96	—	183	0.49	—	—	—	17	60	—	687	—	<0.05	209	—	—	—	2,020
ACW #09	ACW #09	14-Aug-96	—	160	0.65	—	—	—	13	53	—	730	—	0.027	220	—	—	—	1,900
ACW #09	ACW #09	07-Nov-96	—	110	0.44	—	—	—	10	—	—	510	—	0.029	—	—	—	—	—
ACW #09	ACW #09	19-Feb-97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	08-May-97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #09	ACW #09	23-Oct-97	—	84	0.31	—	—	—	10	17	—	320	—	0.05	200	—	—	—	—
ACW #09	ACW #09	13-May-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0185	ACW #09	21-Oct-98	—	400	1.4	—	—	—	25	31	—	1,400	—	<0.05	340	340	<25	<25	4,600
S98-0472	ACW #09	13-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0022	ACW #09	22-Oct-99	<0.005	230	0.80	<0.0002	0.0062	<0.02	22	29	<0.005	990	0.032	<0.05	270	270	<25	<25	3,000
M99-0199	ACW #09	18-Jun-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #10	ACW #10	14-Sep-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #10	ACW #10	09-Nov-93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #10	ACW #10	22-Apr-94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Benzene, µg/l	Toluene, µg/l	Ethylbenzene, µg/l	Total Xylene, µg/l	Gasoline Range Organics, mg/l	Acenaphthene, µg/l	Acenaphthylene, µg/l	Anthracene, µg/l	Benzo(a)anthracene, µg/l	Benzo(b)fluoranthene, µg/l	Benzo(k)fluoranthene, µg/l	Benzo(g,h,i)perylene, µg/l	Benzo(a)pyrene, µg/l	Chrysene, µg/l	Dibenzo(a,h)anthracene, µg/l	Fluoranthene, µg/l	Indeno(1,2,3-cd)pyrene, µg/l	Naphthalene, µg/l	Phenanthrene, µg/l	Pyrene, µg/l
ACW #12	ACW #12	20-Aug-97	1.2	<0.5	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #12D	ACW #12D	20-Aug-97	1.4	<0.5	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #12	ACW #12	23-Oct-97	1.4	0.58	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0058	ACW #12	24-Feb-98	7.3	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0059	ACW #12D	24-Feb-98	6.7	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0188	ACW #12	01-Jun-98	<0.50	1.2	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0189	ACW #12D	01-Jun-98	4.4	2.5	6.1	2.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0294	ACW #12	11-Aug-98	2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0295	ACW #12D	11-Aug-98	2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0474	ACW #12	22-Oct-98	6	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0475	ACW #12D	22-Oct-98	6	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0083	ACW #12	23-Feb-99	6	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0084	ACW #12D	23-Feb-99	5	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0024	ACW #12	14-May-99	4	<2	<2	<2	<0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0026	ACW #12D	14-May-99	4	<2	<2	<2	<0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0087	ACW #12	11-Aug-99	5.3	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0088	ACW #12D	11-Aug-99	2.4	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0202	ACW #12	22-Oct-99	4.7	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0204	ACW #12D	22-Oct-99	4.4	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #13	ACW #13	20-Feb-97	<0.5	<0.5	1.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #13	ACW #13	08-May-97	0.61	0.58	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #13D	ACW #13D	08-May-97	0.65	0.62	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #13	ACW #13	20-Aug-97	<0.5	<0.5	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #13	ACW #13	23-Oct-97	0.59	0.76	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0060	ACW #13	24-Feb-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0190	ACW #13	01-Jun-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0296	ACW #13	11-Aug-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0476	ACW #13	22-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0085	ACW #13	23-Feb-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0027	ACW #13	14-May-99	<2	<2	<2	<2	<0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0089	ACW #13	11-Aug-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0205	ACW #13	22-Oct-99	<2	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #14	ACW #14	20-Feb-97	<0.5	<0.5	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #14	ACW #14	07-May-97	0.88	1.1	0.52	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #14	ACW #14	20-Aug-97	<0.5	<0.5	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #14	ACW #14	22-Oct-97	<0.5	1.2	<0.5	1.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0173	ACW #14	24-Feb-98	<0.50	<0.50	<0.50	0.58J	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0184	ACW #14	13-May-98	0.75	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0293	ACW #14	11-Aug-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0471	ACW #14	21-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S99-0080	ACW #14	23-Feb-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Benzene, µg/l	Toluene, µg/l	Ethylbenzene, µg/l	Total Xylene, µg/l	Gasoline Range Organics, mg/l	Acenaphthene, µg/l	Acenaphthylene, µg/l	Anthracene, µg/l	Benz(a)anthracene, µg/l	Benz(b)fluoranthene, µg/l	Benz(k)fluoranthene, µg/l	Benz(g,h,i)perylene, µg/l	Benz(a)pyrene, µg/l	Chrysene, µg/l	Dibenzo(a,h)anthracene, µg/l	Fluoranthene, µg/l	Fluorene, µg/l	Indeno(1,2,3-cd)pyrene, µg/l	Naphthalene, µg/l	Phenanthrene, µg/l	Pyrene, µg/l
ACW #12	ACW #12	20-Aug-97	1.2	<0.5	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #12D	ACW #12D	20-Aug-97	1.4	<0.5	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #12	ACW #12	23-Oct-97	1.4	0.58	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0058	ACW #12	24-Feb-98	7.3	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0059	ACW #12D	24-Feb-98	6.7	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0188	ACW #12	01-Jun-98	<0.50	1.2	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0189	ACW #12D	01-Jun-98	4.4	2.5	6.1	2.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0294	ACW #12	11-Aug-98	2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0295	ACW #12D	11-Aug-98	2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0474	ACW #12	22-Oct-98	6	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0475	ACW #12D	22-Oct-98	6	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0083	ACW #12	23-Feb-99	6	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0084	ACW #12D	23-Feb-99	5	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0024	ACW #12	14-May-99	4	<2	<2	<2	<0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0026	ACW #12D	14-May-99	4	<2	<2	<2	<0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0087	ACW #12	11-Aug-99	5.3	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0088	ACW #12D	11-Aug-99	2.4	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0202	ACW #12	22-Oct-99	4.7	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0204	ACW #12D	22-Oct-99	4.4	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #13	ACW #13	20-Feb-97	<0.5	<0.5	1.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #13	ACW #13	08-May-97	0.61	0.58	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #13D	ACW #13D	08-May-97	0.65	0.62	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #13	ACW #13	20-Aug-97	<0.5	<0.5	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #13	ACW #13	23-Oct-97	0.59	0.76	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0060	ACW #13	24-Feb-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0190	ACW #13	01-Jun-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0296	ACW #13	11-Aug-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0476	ACW #13	22-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0085	ACW #13	23-Feb-99	<2	<2	<2	<2	<0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0027	ACW #13	14-May-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0089	ACW #13	11-Aug-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0205	ACW #13	22-Oct-99	<2	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #14	ACW #14	20-Feb-97	<0.5	<0.5	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #14	ACW #14	07-May-97	0.88	1.1	0.52	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #14	ACW #14	20-Aug-97	<0.5	<0.5	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #14	ACW #14	22-Oct-97	<0.5	1.2	<0.5	1.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0173	ACW #14	24-Feb-98	<0.50	<0.50	<0.50	0.58J	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0184	ACW #14	13-May-98	0.75	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0293	ACW #14	11-Aug-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0471	ACW #14	21-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S99-0080	ACW #14	23-Feb-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Specific Conductance, umh/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/L	Sulfate, mg/L	pH Temperature °C	Bromide, mg/L	Fluoride, mg/L	Nitrate-N, mg/L	Nitrate as NO ₃ , mg/L	Aluminum, mg/L	Arsenic, mg/L	Barium, mg/L	Boron, mg/L	Cadmium, mg/L	Calcium, mg/L	Chromium, mg/L	Cobalt, mg/L	Copper, mg/L	Iron, mg/L
ACW #12	ACW #12	20-Aug-97	1,120	8.1	740	260	85	—	0.6	1.3	0.2	—	—	—	—	0.2	—	84	—	—	<0.01	0.5
ACW #12D	ACW #12D	20-Aug-97	1,150	8.1	740	280	90	—	0.7	1.3	0.3	—	—	—	—	0.2	—	91	—	—	<0.01	0.4
ACW #12	ACW #12	23-Oct-97	1,810	7.5	850	380	120	—	1	1	0.34	—	—	—	—	0.2	—	150	—	—	<0.01	0.2
S98-0058	ACW #12	24-Feb-98	2,050	7.9	1,200	470	150	—	0.8	2.2	0.4	—	—	—	—	—	—	170	—	—	—	—
S98-0059	ACW #12D	24-Feb-98	2,090	7.9	1,220	490	160	—	0.9	2.1	0.5	—	—	—	—	—	—	170	—	—	—	—
S98-0188	ACW #12	01-Jun-98	2,000	7.5	1,500	—	—	—	—	—	—	—	—	—	—	—	—	210	—	—	—	—
S98-0189	ACW #12D	01-Jun-98	2,300	7.4	1,700	540	150	—	0.74	1.3	0.54	—	—	—	—	—	—	200	—	—	—	—
S98-0294	ACW #12	11-Aug-98	1,790	7.61	1,240	440	130	19.8	<2	1.3	1.4	—	—	—	—	—	—	180	—	—	—	—
S98-0295	ACW #12D	11-Aug-98	2,020	7.51	1,300	520	140	19.3	<1	1.1	<2.5	—	—	—	—	—	—	180	—	—	—	—
S98-0474	ACW #12	22-Oct-98	2,280	7.39	1,520	610	170	20.0	<2	0.99	0.44	—	—	—	—	0.27	—	210	—	—	<0.0025	0.17
S98-0475	ACW #12D	22-Oct-98	2,310	7.36	1,690	600	170	20.1	<2	0.90	0.51	—	—	—	—	0.26	—	200	—	—	<0.0025	0.17
S99-0083	ACW #12	23-Feb-99	2,020	7.68	1,240	500	120	12.3	<2	1.2	0.18	—	—	—	—	—	—	200	—	—	—	—
S99-0084	ACW #12D	23-Feb-99	2,050	7.67	1,280	480	140	12.8	<2	1.1	0.23	—	—	—	—	—	—	190	—	—	—	—
S99-0024	ACW #12	14-May-99	2,390	7.47	1,440	500	120	23.8	<2	0.86	0.14	—	—	—	—	—	—	210	—	—	—	—
M99-0026	ACW #12D	14-May-99	2,350	7.42	1,410	590	150	23.9	<2	0.86	0.15	—	—	—	—	0.28	—	210	—	—	0.0063	0.16
M99-0087	ACW #12	11-Aug-99	2,650	7.35	1,750	750	160	21.7	<0.2	0.85	0.45	—	—	—	—	0.26	—	210	—	—	0.0044	0.16
M98-0088	ACW #12D	11-Aug-99	2,630	7.33	1,880	810	160	21.1	<1	0.85	0.53	—	—	—	—	—	—	270	—	—	—	—
M99-0202	ACW #12	22-Oct-99	2,180	7.50	1,620	650	130	19.8	<2	0.98	0.41	—	0.034	0.0084	0.13	0.26	<0.002	220	<0.005	<0.005	<0.0025	0.14
M98-0204	ACW #12D	22-Oct-99	2,170	7.48	1,390	560	140	19.8	<2	0.95	0.32	—	0.031	0.0084	0.13	0.26	<0.002	230	<0.005	<0.005	<0.0025	0.16
ACW #13	ACW #13	20-Feb-97	681	—	440	53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #13	ACW #13	08-May-97	643	—	460	57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #13D	ACW #13D	08-May-97	630	—	460	52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #13	ACW #13	20-Aug-97	654	8.3	440	55	96	—	0.4	1.3	0.99	—	—	—	—	0.2	—	39	—	—	<0.01	0.3
ACW #13	ACW #13	23-Oct-97	728	8.3	400	50	95	—	0.4	1.3	1	—	—	—	—	0.2	—	34	—	—	<0.01	0.2
S98-0060	ACW #13	24-Feb-98	727	8.4	450	59	100	—	0.5	1.6	1.2	—	—	—	—	—	—	31	—	—	—	—
S98-0190	ACW #13	01-Jun-98	700	8.0	450	—	—	—	—	—	1.2	—	—	—	—	—	—	40	—	—	—	—
S98-0296	ACW #13	11-Aug-98	679	7.93	467	48	110	19.7	<5	1.6	3.3	—	—	—	—	—	—	43	—	—	—	—
S98-0476	ACW #13	22-Oct-98	686	7.94	439	47	92	19.9	<5	1.3	1.3	—	—	—	—	0.23	—	48	—	—	<0.0025	0.37
S99-0085	ACW #13	23-Feb-99	752	8.18	493	74	93	12.6	0.3	1.5	0.74	—	—	—	—	—	—	44	—	—	—	—
M99-0027	ACW #13	14-May-99	693	7.96	403	45	96	24.1	0.4	1.3	1.4	—	—	—	—	0.25	—	46	—	—	0.0062	0.17
M99-0089	ACW #13	11-Aug-99	676	7.95	359	41	97	21.9	1.2	1.4	1.4	—	—	—	—	—	—	49	—	—	—	—
M99-0205	ACW #13	22-Oct-99	674	7.98	436	48	93	20.0	0.36	1.4	1.3	—	0.11	0.013	0.057	0.23	<0.002	49	0.0055	<0.005	<0.0025	0.23
ACW #14	ACW #14	20-Feb-97	830	—	570	88	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #14	ACW #14	07-May-97	746	—	480	72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ACW #14	ACW #14	20-Aug-97	691	7.8	460	80	82	—	0.4	1.6	0.94	—	—	—	—	0.2	—	45	—	—	<0.01	0.5
ACW #14	ACW #14	22-Oct-97	747	8.1	440	71	95	—	0.5	1.5	0.9	—	—	—	—	0.2	—	46	—	—	<0.01	0.3
S98-0173	ACW #14	24-Feb-98	755	8.2	470	40	130	—	0.5	2	1.8	—	—	—	—	—	—	46	—	—	—	—
S98-0184	ACW #14	13-May-98	880	7.9	530	58	110	—	<2	1.7	1.7	—	—	—	—	—	—	47	—	—	—	—
S98-0293	ACW #14	11-Aug-98	730	7.76	496	160	110	19.2	<5	1.9	2.5	—	—	—	—	—	—	48	—	—	—	—
S98-0471	ACW #14	21-Oct-98	771	7.70	466	71	100	20.2	<2	1.9	1.7	—	—	—	—	0.25	—	52	—	—	0.0026	0.20
S99-0080	ACW #14	23-Feb-99	859	7.92	524	88	98	19.2	0.3	1.8	1.9	—	—	—	—	—	—	47.9	0.0055	<0.005	<0.0025	0.20

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES, JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
ACW #12	ACW #12	20-Aug-97	---	31	0.05	---	---	---	23	18	---	100	---	<0.02	130	---	---	---	---
ACW #12D	ACW #12D	20-Aug-97	---	34	0.05	---	---	---	22	19	---	100	---	<0.02	120	---	---	---	---
ACW #12	ACW #12	23-Oct-97	---	54	0.03	---	---	---	13	20	---	120	---	<0.02	160	---	---	---	---
S98-0058	ACW #12	24-Feb-98	---	60	---	---	---	---	10	21	---	120	---	---	160	---	---	---	---
S98-0059	ACW #12D	24-Feb-98	---	60	---	---	---	---	10	21	---	120	---	---	150	---	---	---	---
S98-0188	ACW #12	01-Jun-98	---	73	---	---	---	---	9	23	---	130	---	---	150	---	---	---	---
S98-0189	ACW #12D	01-Jun-98	---	71	---	---	---	---	9	22	---	130	---	---	150	---	---	---	---
S98-0294	ACW #12	11-Aug-98	---	62	---	---	---	---	9.8	21	---	130	---	---	140	---	<25	<25	710
S98-0295	ACW #12D	11-Aug-98	---	61	---	---	---	---	9.7	24	---	130	---	---	160	---	<25	<25	700
S98-0474	ACW #12	22-Oct-98	---	80	0.032	---	---	---	10	23	---	140	---	<0.05	150	---	<25	<25	850
S98-0475	ACW #12D	22-Oct-98	---	72	0.029	---	---	---	10	24	---	130	---	<0.05	150	---	<25	<25	810
S99-0083	ACW #12	23-Feb-99	---	73	---	---	---	---	8.8	25	---	180	---	---	160	---	<25	<25	810
S99-0084	ACW #12D	23-Feb-99	---	68	---	---	---	---	8.5	26	---	180	---	---	160	---	<25	<25	750
M99-0024	ACW #12	14-May-99	---	74	0.026	---	---	---	9.5	23	---	150	---	<0.05	150	---	<25	<25	840
M99-0026	ACW #12D	14-May-99	---	73	0.025	---	---	---	9.0	26	---	140	---	<0.05	150	---	<25	<25	810
M99-0087	ACW #12	11-Aug-99	---	96	---	---	---	---	9.0	29	---	160	---	---	140	---	<25	<25	1100
M99-0088	ACW #12D	11-Aug-99	---	98	---	---	---	---	9.2	36	---	160	---	---	140	---	<25	<25	1100
M99-0202	ACW #12	22-Oct-99	<0.005	0.77	0.024	<0.0002	0.0043	<0.02	8.4	21	<0.005	140	0.0088	<0.05	140	---	<25	<25	860
M99-0204	ACW #12D	22-Oct-99	<0.005	79	0.024	<0.0002	<0.005	<0.02	8.7	20	<0.005	140	0.0086	<0.05	140	---	<25	<25	880
ACW #13	ACW #13	20-Feb-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13	ACW #13	08-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13D	ACW #13D	08-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13	ACW #13	20-Aug-97	---	14	0.02	---	---	---	10	20	---	79	---	<0.02	160	---	---	---	---
ACW #13	ACW #13	23-Oct-97	---	14	<0.01	---	---	---	15	21	---	84	---	<0.02	170	---	---	---	---
S98-0060	ACW #13	24-Feb-98	---	14	---	---	---	---	17	21	---	87	---	---	170	---	---	---	---
S98-0190	ACW #13	01-Jun-98	---	14	---	---	---	---	10	21	---	85	---	---	170	---	---	---	---
S98-0296	ACW #13	11-Aug-98	---	14	---	---	---	---	9.4	15	---	85	---	---	170	---	---	---	---
S98-0476	ACW #13	22-Oct-98	---	16	0.017	---	---	---	7.5	23	---	87	---	<0.05	170	---	<25	<25	170
S99-0085	ACW #13	23-Feb-99	---	15	---	---	---	---	7.0	23	---	110	---	---	180	---	<25	<25	180
M99-0027	ACW #13	14-May-99	---	15	0.0084	---	---	---	5.3	28	---	86	---	<0.05	170	---	<25	<25	180
M99-0089	ACW #13	11-Aug-99	---	16	---	---	---	---	5.0	26	---	86	---	---	170	---	<25	<25	190
M99-0205	ACW #13	22-Oct-99	<0.005	15	0.018	<0.0002	0.0044	<0.02	5.9	19	<0.005	89	<0.005	<0.05	160	---	<25	<25	190
ACW #14	ACW #14	20-Feb-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #14	ACW #14	07-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #14	ACW #14	20-Aug-97	---	15	0.03	---	---	---	5	20	---	81	---	0.03	150	---	---	---	---
ACW #14	ACW #14	22-Oct-97	---	16	0.01	---	---	---	5	20	---	81	---	<0.02	180	---	---	---	---
S98-0173	ACW #14	24-Feb-98	---	16	---	---	---	---	5	22	---	87	---	---	180	---	---	---	---
S98-0184	ACW #14	13-May-98	---	18	---	---	---	---	6	24	---	97	---	---	170	---	---	---	---
S98-0293	ACW #14	11-Aug-98	---	16	---	---	---	---	5.5	25	---	90	---	---	170	---	---	---	---
S98-0471	ACW #14	21-Oct-98	---	19	0.014	---	---	---	6.2	25	---	97	---	<0.05	170	---	<25	<25	190
S99-0080	ACW #14	23-Feb-99	---	17	---	---	Page 15 of 24	---	6.0	25	---	110	---	---	180	---	<25	<25	190

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Benzene, µg/l	Toluene, µg/l	Ethylbenzene, µg/l	Total Xylene, µg/l	Gasoline Range Organics, mg/l	Acenaphthene, µg/l	Acenaphthylene, µg/l	Anthracene, µg/l	Benzo(a)anthracene, µg/l	Benzo(b)fluoranthene, µg/l	Benzo(k)fluoranthene, µg/l	Benzo(g,h,i)perylene, µg/l	Benzo(a)pyrene, µg/l	Chrysene, µg/l	Dibenzo(a,h)anthracene, µg/l	Fluoranthene, µg/l	Fluorene, µg/l	Indeno(1,2,3-cd)pyrene, µg/l	Naphthalene, µg/l	Phenanthrene, µg/l	Pyrene, µg/l
M99-0021	ACW #14	13-May-99	<2	<2	<2	<2	<0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0086	ACW #14	09-Aug-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M98-0197	ACW #14	21-Oct-99	<2	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0206	ACW #17	23-Oct-99	3.2	5.3	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ENSR #1	ENSR #1	07-May-97	7.3	3.7	2.4	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ENSR #1	ENSR #1	21-Oct-97	13	6.3	4.2	5.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0172	ENSR #1	12-May-98	13	4.6	4.0	4.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0457	ENSR #1	20-Oct-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0004	ENSR #1	11-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0188	ENSR #1	20-Oct-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ENSR #2	ENSR #2	06-May-97	250	230	110	180	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ENSR #2	ENSR #2	20-Oct-97	130	160	77	120	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0169	ENSR #2	12-May-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0453	ENSR #2	19-Oct-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0009	ENSR #2	11-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0183	ENSR #2	19-Oct-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ENSR #3	ENSR #3	07-May-97	7.6	3.3	2.9	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ENSR #3D	ENSR #3D	07-May-97	6.8	3.1	2.8	2.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ENSR #3	ENSR #3	21-Oct-97	5	2.5	3	4.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0175	ENSR #3	12-May-98	9.5	3.4	1.9	2.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0176	ENSR #3D	12-May-98	14	4.4	2.3	4.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0461	ENSR #3	20-Oct-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0462	ENSR #3D	20-Oct-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0006	ENSR #3	11-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0007	ENSR #3D	20-Oct-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0189	ENSR #3	20-Oct-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0190	ENSR #3D	20-Oct-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0063	Oxy Production Well	24-Feb-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0186	Oxy Production Well	13-May-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0299	Oxy Production Well	11-Aug-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0465	Oxy Production Well	20-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0082	Oxy Production Well	23-Feb-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0025	Oxy Production Well	13-May-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0093	Oxy Production Well	11-Aug-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0203	Oxy Production Well	22-Oct-99	<2	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Production Well #1	Production Well #1	08-May-97	0.56	0.55	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Production Well #1	Production Well #1	23-Oct-97	<0.5	<0.5	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0193	Production Well #1	14-May-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0194	Production Well #1D	14-May-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0479	Production Well #1	22-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/L	Sulfate, mg/L	pH Temperature °C	Bromide, mg/L	Fluoride, mg/L	Nitrate-N, mg/L	Nitrate as NO ₃ , mg/L	Aluminum, mg/L	Arsenic, mg/L	Barium, mg/L	Boron, mg/L	Cadmium, mg/L	Calcium, mg/L	Chromium, mg/L	Cobalt, mg/L	Copper, mg/L	Iron, mg/L
M99-0021	ACW #14	13-May-99	764	7.89	500	62	100	23.5	0.4	1.6	2.0	---	---	---	---	0.27	---	49	---	---	0.016	0.17
M99-0086	ACW #14	09-Aug-99	791	7.80	471	58	120	21.3	0.3	1.6	1.8	---	---	---	---	---	---	52	---	---	---	---
M99-0197	ACW #14	21-Oct-99	753	7.79	469	68	100	20.4	0.37	1.8	2.0	---	0.078	0.013	0.046	0.24	<0.002	48	<0.005	<0.005	<0.0025	0.21
M99-0206	ACW #17	23-Oct-99	1,010	8.24	587	180	87	21.2	<2	1.6	0.81	---	0.79	0.0089	0.11	0.21	<0.002	66	0.022	<0.005	0.0039	0.75
ENSR #1	ENSR #1	07-May-97	8,620	---	5,200	3,200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #1	ENSR #1	21-Oct-97	13,800	---	7,600	4,400	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0172	ENSR #1	12-May-98	12,000	---	6,700	3,600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0457	ENSR #1	20-Oct-98	12,400	---	7,590	4,200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0004	ENSR #1	11-May-99	14,700	---	8,450	5,500	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0188	ENSR #1	20-Oct-99	12,400	---	6,290	4,100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #2	ENSR #2	06-May-97	50,000	---	27,000	17,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #2	ENSR #2	20-Oct-97	57,900	---	30,000	17,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0169	ENSR #2	12-May-98	38,000	---	21,000	13,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0453	ENSR #2	19-Oct-98	44,800	---	30,000	18,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0009	ENSR #2	11-May-99	49,100	---	31,200	18,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0183	ENSR #2	19-Oct-99	28,900	---	16,600	9,400	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #3	ENSR #3	07-May-97	2,050	---	1,500	650	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #3D	ENSR #3D	07-May-97	1,990	---	1,400	480	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #3	ENSR #3	21-Oct-97	2,230	---	1,300	580	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0175	ENSR #3	12-May-98	2,400	---	1,400	610	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0176	ENSR #3D	12-May-98	2,200	---	1,300	550	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0461	ENSR #3	20-Oct-98	2,260	---	1,580	590	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0462	ENSR #3D	20-Oct-98	2,240	---	1,290	540	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0006	ENSR #3	11-May-99	2,490	---	1,370	500	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0189	ENSR #3	11-May-99	2,480	---	1,380	610	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0190	ENSR #3D	20-Oct-99	2,390	---	1,630	600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0063	Oxy Production Well	24-Feb-98	802	8.1	480	120	68	---	0.7	1.3	0.9	---	---	---	---	---	---	60	---	---	---	---
S98-0186	Oxy Production Well	13-May-98	800	7.8	480	120	61	---	<2	1.1	0.93	---	---	---	---	---	---	66	---	---	---	---
S98-0299	Oxy Production Well	11-Aug-98	762	7.78	604	120	58	20.2	<1	<0.4	0.85/<0.05	3.7	---	---	---	---	---	72	---	---	---	---
S98-0465	Oxy Production Well	20-Oct-98	734	7.79	488	100	55	17.3	<2	1.1	0.76	---	---	---	---	---	---	---	---	---	---	---
S99-0082	Oxy Production Well	23-Feb-99	810	7.99	407	120	45	14.5	0.5	1.0	0.71	---	---	---	---	---	---	80	---	---	---	---
M99-0025	Oxy Production Well	13-May-99	808	7.91	468	120	59	23.6	0.6	0.96	0.27	---	---	---	---	0.20	---	74	---	---	<0.0025	0.74
M99-0093	Oxy Production Well	11-Aug-99	831	7.67	466	140	59	20.5	0.5	1.0	0.78	---	---	---	---	---	---	75	---	---	---	---
M99-0203	Oxy Production Well	22-Oct-99	788	7.86	490	130	56	19.2	0.53	1.0	0.41	---	<0.025	0.011	0.10	0.18	---	72	<0.005	<0.005	0.022	2.8
Production Well #1	Production Well #1	08-May-97	718	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Production Well #1	Production Well #1	23-Oct-97	890	---	470	91	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0193	Production Well #1	14-May-98	850	---	500	67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0194	Production Well #1D	14-May-98	860	---	520	67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0479	Production Well #1	22-Oct-98	994	---	659	56	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES, JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Benzene, µg/l	Toluene, µg/l	Ethylbenzene, µg/l	Total Xylene, µg/l	Gasoline Range Organics, mg/l	Acenaphthene, µg/l	Acenaphthylene, µg/l	Anthracene, µg/l	Benzo(a)anthracene, µg/l	Benzo(b)fluoranthene, µg/l	Benzo(k)fluoranthene, µg/l	Benzo(g,h,i)perylene, µg/l	Benzo(a)pyrene, µg/l	Chrysene, µg/l	Dibenzo(a,h)anthracene, µg/l	Fluoranthene, µg/l	Fluorene, µg/l	Indeno(1,2,3-cd)pyrene, µg/l	Naphthalene, µg/l	Phenanthrene, µg/l	Pyrene, µg/l
M99-0030	Production Well #1	14-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0210	Production Well #1	23-Oct-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0057	Production Well Dooms	24-Feb-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0180	Production Well Dooms	13-May-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0292	Production Well Dooms	10-Aug-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0464	Production Well Dooms	20-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0081	Production Well Dooms	23-Feb-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0018	Production Well Dooms	13-May-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0092	Production Well Dooms	11-Aug-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0193	Production Well Dooms	21-Oct-99	<2	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PTP #1	PTP #1	07-May-97	38	0.51	22	8.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PTP #1	PTP #1	21-Oct-97	7.9	<0.5	18	3.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0177	PTP #1	12-May-98	62	1.6	21	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0463	PTP #1	20-Oct-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0008	PTP #1	11-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0191	PTP #1	20-Oct-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0451	Bailer Blank	19-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0066	Bailer Blank Pre Sample	24-Feb-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0158	Bailer Blank Pre Sample	11-May-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0290	Bailer Blank Pre Sample	10-Aug-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0178	Bailer Blank-Middle Sample	12-May-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0466	Bailer Blank-Middle Sample	21-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0061	Bailer Blank Post Sample	24-Feb-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0191	Bailer Blank Post Sample	14-May-98	0.66	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0225	Bailer Blank Post Sample	01-Jun-98	12	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0297	Bailer Blank Post Sample	11-Aug-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0478	Bailer Blank Post Sample	22-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0078	Bailer Blank Before	23-Feb-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0087	Bailer Blank After Sampling	23-Feb-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0002	Bailer Blank Before Sampling	10-May-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0016	Bailer Blank Middle	12-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0029	Bailer Blank After Sampling	14-May-99	<2	<2	<2	<2	<0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0085	Bailer Blank Before Sampling	09-Aug-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0090	Bailer Blank After Sampling	11-Aug-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0182	Bailer Blank Before Sampling	18-Oct-99	<2	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0198	Bailer Blank Middle	22-Oct-99	<2	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0208	Bailer Blank After Sampling	23-Oct-99	<2	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0477	EMP #3 Post Purge	22-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0452	EMP #3 Pre Purge Blank	19-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0179	EMP #3 Pump Blank Middle Sample	12-May-98	30	20	6.5	1.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/L	Sulfate, mg/L	pH Temperature °C	Bromide, mg/L	Fluoride, mg/L	Nitrate-N, mg/L	Nitrate as NO ₃ , mg/L	Aluminum, mg/L	Arsenic, mg/L	Barium, mg/L	Boron, mg/L	Cadmium, mg/L	Calcium, mg/L	Chromium, mg/L	Cobalt, mg/L	Copper, mg/L	Iron, mg/L
M99-0030	Production Well #1	14-May-99	846	—	469	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M98-0210	Production Well #1	23-Oct-99	891	—	540	2.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0057	Production Well Doms	24-Feb-98	634	8.1	410	38	85	—	0.3	1.1	1.2	—	—	—	—	—	—	—	—	—	—	—
S98-0180	Production Well Doms	13-May-98	640	7.8	410	30	81	—	<2	1.2	1.2	—	—	—	—	—	—	—	—	—	—	—
S98-0292	Production Well Doms	10-Aug-98	629	7.76	450	34	83	20.2	<1	<0.4	1.2/<0.05	5.3	—	—	—	—	—	—	—	—	—	—
S98-0464	Production Well Doms	20-Oct-98	636	7.71	464	35	80	18.0	<2	1.0	1.2	—	—	—	—	—	—	—	—	—	—	—
S99-0081	Production Well Doms	23-Feb-99	627	7.86	364	31	73	14.9	0.3	0.89	0.89	—	—	—	—	—	—	—	—	—	—	—
M99-0018	Production Well Doms	13-May-99	630	7.76	381	34	80	23.6	0.4	0.84	0.62	—	—	—	—	—	—	—	—	—	—	—
M99-0092	Production Well Doms	11-Aug-99	629	7.69	372	30	79	19.8	0.2	0.83	1.1	—	—	—	—	—	—	—	—	—	—	—
M99-0193	Production Well Doms	21-Oct-99	617	7.74	400	32	74	19.2	0.29	0.86	1.1	—	—	—	—	—	—	—	—	—	—	—
PTP #1	PTP #1	07-May-97	2,420	—	1,500	490	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PTP #1	PTP #1	21-Oct-97	2,250	—	1,400	470	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0177	PTP #1	12-May-98	2,300	—	1,400	480	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0463	PTP #1	20-Oct-98	2,080	—	1,410	380	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0008	PTP #1	11-May-99	2,250	—	1,240	330	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0191	PTP #1	20-Oct-99	2,300	—	1,630	460	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0451	Bailer Blank	19-Oct-98	1.13	5.95	<25	<0.1	<0.1	17.8	<0.2	<0.4	<0.05	—	—	—	—	<0.01	—	0.49	—	—	<0.0025	<0.05
S98-0066	Bailer Blank Pre Sample	24-Feb-98	3	5.7	<20	<0.2	<1	—	<0.2	<0.1	<0.2	—	—	—	—	—	—	<1	—	—	—	—
S98-0158	Bailer Blank Pre Sample	11-May-98	9.6	5.8	<20	<0.2	<1	—	<0.2	<0.1	<0.05	—	—	—	—	—	—	—	—	—	—	—
S98-0290	Bailer Blank Pre Sample	10-Aug-98	4.45	5.08	30	<0.1	<2.0	18.8	<0.1	<0.10	<1.25	—	—	—	—	—	—	<0.25	—	—	—	—
S98-0178	Bailer Blank-Middle Sample	12-May-98	24	5.6	<20	<0.2	<1	—	<0.2	<0.1	<0.05	—	—	—	—	—	—	—	—	—	—	—
S98-0466	Bailer Blank-Middle Sample	21-Oct-98	16.9	7.34	<25	<0.1	<0.1	21.0	<0.2	<0.4	<0.05	—	—	—	—	<0.01	—	3.2	—	—	<0.0025	<0.05
S98-0061	Bailer Blank Post Sample	24-Feb-98	1	6.0	<20	<0.2	<1	—	<0.2	<0.1	<0.2	—	—	—	—	—	—	<1	—	—	—	—
S98-0191	Bailer Blank Post Sample	14-May-98	15	5.6	<20	<0.2	<1	—	<0.2	<0.1	<0.05	—	—	—	—	—	—	<1	—	—	—	—
S98-0225	Bailer Blank Post Sample	01-Jun-98	12	5.5	<20	<0.2	<1	—	<0.2	<0.1	0.09	—	—	—	—	—	—	<1	—	—	—	—
S98-0297	Bailer Blank Post Sample	11-Aug-98	3.83	5.16	31	<0.1	<2.0	19.9	<0.1	<0.10	<2.5	—	—	—	—	—	—	<0.25	—	—	—	—
S98-0478	Bailer Blank Post Sample	22-Oct-98	1.22	5.77	<25	<0.1	<0.1	21.2	<0.2	<0.4	<0.05	—	—	—	—	0.01	—	<0.25	—	—	<0.0025	<0.05
S99-0078	Bailer Blank Before	23-Feb-99	2.17	5.83	<25	<0.1	<0.1	14.3	<0.2	<0.4	0.09	—	—	—	—	—	—	<0.25	—	—	—	—
S99-0087	Bailer Blank After Sampling	23-Feb-99	1.35	5.78	<25	<0.1	<0.1	16.9	<0.2	<0.4	<0.05	—	—	—	—	—	—	<0.25	—	—	—	—
M99-0002	Bailer Blank Before Sampling	10-May-99	1.63	5.86	32	0.1	0.1	22.7	<0.2	<0.4	<0.05	—	—	—	—	<0.01	—	<0.25	—	—	<0.0025	<0.05
M99-0016	Bailer Blank Middle	12-May-99	1.21	—	<25	<0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0029	Bailer Blank After Sampling	14-May-99	1.52	5.86	<25	<0.1	<0.1	24.6	<0.2	<0.4	0.084	—	—	—	—	<0.01	—	<0.002	—	—	<0.0025	0.060
M99-0085	Bailer Blank Before Sampling	09-Aug-99	8.98	7.57	565	88	190	19.1	0.5	1.6	<0.05	—	—	—	—	<0.01	—	<0.25	—	—	<0.0025	<0.05
M99-0090	Bailer Blank After Sampling	11-Aug-99	5.80	8.41	266	48	1.0	21.0	<1	<0.4	0.74	—	—	—	—	—	97	—	—	—	—	—
M99-0182	Bailer Blank Before Sampling	18-Oct-99	4.00	6.04	<15	0.34	<0.5	20.2	<0.2	<0.4	0.084	—	—	—	—	<0.0025	<0.002	0.39	<0.005	<0.005	<0.0025	0.060
M99-0198	Bailer Blank Middle	22-Oct-99	4.00	6.04	<15	0.31	<0.5	20.2	<0.2	<0.4	0.072	—	—	—	—	<0.0025	<0.002	0.32	<0.005	<0.005	<0.0025	<0.05
M99-0208	Bailer Blank After Sampling	23-Oct-99	3.75	6.03	<15	0.32	<0.5	22.4	<0.2	<0.4	0.088	—	—	—	—	<0.0025	<0.002	0.32	<0.005	<0.005	<0.0025	<0.05
S98-0477	EMP #3 Post Purge	22-Oct-98	662	8.26	424	100	50	20.1	<5	1.6	<0.05	—	—	—	—	0.19	—	45	—	—	<0.0025	0.77
S98-0452	EMP #3 Pre Purge Blank	19-Oct-98	631	8.26	369	100	50	17.1	<2	1.6	<0.05	—	—	—	—	<0.01	—	<0.25	—	—	<0.0025	<0.05
S98-0179	EMP #3 Pump Blank Middle Sample	12-May-98	720	7.9	390	87	57	—	<2	1.7	<0.05	—	—	—	—	—	—	50	—	—	—	—

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
M99-0030	Production Well #1	14-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0210	Production Well #1	23-Oct-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0057	Production Well Doms	24-Feb-98	—	16	—	—	—	—	4	25	—	64	—	—	200	—	—	—	—
S98-0180	Production Well Doms	13-May-98	—	—	—	—	—	—	—	—	—	—	—	—	190	—	—	—	—
S98-0292	Production Well Doms	10-Aug-98	—	17	—	—	—	—	4.3	27	—	71	—	—	200	—	—	—	—
S98-0464	Production Well Doms	20-Oct-98	—	17	<0.0025	—	—	—	4.1	29	—	69	—	<0.05	190	—	—	<25	200
S99-0081	Production Well Doms	23-Feb-99	—	16	—	—	—	—	4.1	26	—	72	—	—	190	—	—	<25	190
M99-0018	Production Well Doms	13-May-99	—	17	0.039	—	—	—	4.0	33	—	72	—	0.089	180	—	—	<25	200
M99-0092	Production Well Doms	11-Aug-99	—	17	—	—	—	—	3.8	27	—	73	—	—	190	—	—	<25	200
M99-0193	Production Well Doms	21-Oct-99	<0.001	18	0.0093	<0.0002	0.0048	<0.02	4.7	24	<0.005	77	0.0055	0.11	180	—	—	<25	200
PTP #1	PTP #1	07-May-97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PTP #1	PTP #1	21-Oct-97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0177	PTP #1	12-May-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0463	PTP #1	20-Oct-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0008	PTP #1	11-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0191	PTP #1	20-Oct-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0451	Bailer Blank	19-Oct-98	—	<0.25	<0.0025	—	—	—	<1	<0.25	—	1.1	—	<0.05	<25	<25	<25	<25	1.2
S98-0066	Bailer Blank Pre Sample	24-Feb-98	—	<1	—	—	—	—	<1	<0.05	—	<1	—	—	<5	—	—	—	—
S98-0158	Bailer Blank Pre Sample	11-May-98	—	—	—	—	—	—	—	—	—	—	—	—	<5	<5	—	—	—
S98-0290	Bailer Blank Pre Sample	10-Aug-98	—	<0.25	—	—	—	—	<0.25	<10	—	0.88	—	—	<25	<25	<25	<25	<1
S98-0178	Bailer Blank-Middle Sample	12-May-98	—	—	—	—	—	—	—	—	—	—	—	—	<5	<5	—	—	—
S98-0466	Bailer Blank-Middle Sample	21-Oct-98	—	<0.25	<0.0025	—	—	—	<1	<0.25	—	0.30	—	<0.05	<25	<25	<25	<25	7.9
S98-0061	Bailer Blank Post Sample	24-Feb-98	—	<1	—	—	—	—	<1	<0.05	—	<1	—	—	<5	—	—	—	—
S98-0191	Bailer Blank Post Sample	14-May-98	—	<1	—	—	—	—	<1	<0.05	—	<1	—	—	<5	<5	—	—	—
S98-0225	Bailer Blank Post Sample	01-Jun-98	—	<1	—	—	—	—	<1	0.16	—	—	—	—	<5	<5	—	—	—
S98-0297	Bailer Blank Post Sample	11-Aug-98	—	<0.25	—	—	—	—	<0.25	<10	—	<0.25	—	—	<25	<25	<25	<25	<1
S98-0478	Bailer Blank Post Sample	22-Oct-98	—	<0.25	<0.0025	—	—	—	<1	<0.25	—	<0.25	—	<0.05	<25	<25	<25	<25	<0.5
S99-0078	Bailer Blank Before	23-Feb-99	—	<0.25	—	—	—	—	<1	<1	—	0.27	—	—	<25	<25	<25	<25	<1
S99-0087	Bailer Blank After Sampling	23-Feb-99	—	<0.25	—	—	—	—	<1	<1	—	<0.25	—	—	<25	<25	<25	<25	<1
M99-0002	Bailer Blank Before Sampling	10-May-99	—	<0.25	<0.0025	—	—	—	<1	<0.2	—	<0.25	—	<0.05	<25	<25	<25	<25	<1
M99-0016	Bailer Blank Middle	12-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0029	Bailer Blank After Sampling	14-May-99	—	<0.25	<0.0025	—	—	—	<1	<0.2	—	0.41	—	<0.05	<25	<25	<25	<25	<1
M99-0085	Bailer Blank Before Sampling	09-Aug-99	—	22	—	—	—	—	5.2	21	—	80	—	—	110	—	—	<25	<1
M99-0090	Bailer Blank After Sampling	11-Aug-99	—	<0.25	—	—	—	—	1.4	10	—	140	—	—	220	—	—	<25	330
M99-0182	Bailer Blank Before Sampling	18-Oct-99	<0.005	<0.25	<0.0025	<0.0002	<0.005	<0.02	<1	<1	<0.005	<0.25	<0.005	<0.05	<25	2	<25	<25	2.6
M99-0198	Bailer Blank Middle	22-Oct-99	<0.005	<0.25	<0.0025	<0.0002	<0.005	<0.02	<1	<1	<0.005	<0.25	<0.005	<0.05	<25	<25	<25	<25	<1
M99-0208	Bailer Blank After Sampling	23-Oct-99	<0.005	<0.25	<0.0025	<0.0002	<0.005	<0.02	<1	<1	<0.005	<0.25	<0.005	<0.05	<25	<25	<25	<25	<1
S98-0477	EMP #3 Post Purge	22-Oct-98	—	13	0.050	—	—	—	4.0	15	—	75	—	<0.05	130	—	—	<25	160
S98-0452	EMP #3 Pre Purge Blank	19-Oct-98	—	<0.25	<0.0025	—	—	—	<1	13	—	<0.25	—	<0.05	110	—	—	<25	<1
S98-0179	EMP #3 Pump Blank Middle Sample	12-May-98	—	13	—	—	—	—	4	18	—	75	—	—	150	—	—	—	—

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Benzene, µg/l	Toluene, µg/l	Ethylbenzene, µg/l	Total Xylene, µg/l	Gasoline Range Organics, mg/l	Acenaphthene, µg/l	Acenaphthylene, µg/l	Anthracene, µg/l	Benzo(a)anthracene, µg/l	Benzo(b)fluoranthene, µg/l	Benzo(k)fluoranthene, µg/l	Benzo(g,h,i)perylene, µg/l	Benzo(a)pyrene, µg/l	Chrysene, µg/l	Dibenzo(a,h)anthracene, µg/l	Fluoranthene, µg/l	Fluorene, µg/l	Indeno(1,2,3-cd)pyrene, µg/l	Naphthalene, µg/l	Phenanthrene, µg/l	Pyrene, µg/l
S98-0468	EMP #3 Pump Blank Middle Sample	21-Oct-98	2	3	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0062	EMP #3 Pump Blank Post Sample	24-Feb-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0192	EMP #3 Pump Blank Post Sample	14-May-98	3.0	3.4	1.4	2.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0224	EMP #3 Pump Blank Post Sample	01-Jun-98	<0.50	0.83	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0298	EMP #3 Pump Blank Post Sample	11-Aug-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0065	EMP #3 Pump Blank Pre Sample	24-Feb-98	<0.50	1.1	0.74	1.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0156	EMP #3 Pump Blank Pre Sample	11-May-98	6.7	1.7	<0.50	6.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0289	EMP #3 Pump Blank Pre Sample	10-Aug-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S99-0079	EMP #3 Pump Blank Before	23-Feb-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S99-0086	EMP #3 Pump Blank After	23-Feb-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0003	EMP #3 Before Purging Wells	10-May-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0015	EMP #3 Middle	12-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0028	EMP #3 After Purging	14-May-99	<2	3	<2	<2	<0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0084	EMP #3 Pump Blank Before	09-Aug-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0091	EMP #3 Pump Blank After	11-Aug-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0180	EMP #3 Before Purging Wells	18-Oct-99	14	31	2.0	4.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0200	EMP #3 Middle	22-Oct-99	2.6	7.7	2.6	4.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0207	EMP #3 After Purging	23-Oct-99	<2	7.4	2.6	4.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0064	Field Blank	24-Feb-98	<0.50	0.93	<0.50	2.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0171	Field Blank	12-May-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0223	Field Blank	01-Jun-98	17	100	<0.50	120	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0291	Field Blank	10-Aug-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0480	Field Blank	22-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S99-0077	Field Blank	23-Feb-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0001	Field Blank	10-May-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0209	Field Blank	23-Oct-99	<2	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Notes:

1. < : Denotes a sample value of less than the laboratory reporting limit.
2. Jm : Estimated value—possible matrix effect.
3. * : Method blank had detectable levels of this compound.
4. 1.2/<0.05 : NEL Lab result/Montgomery Watson Lab result.
5. P : Denotes sample was received with a pH greater than 2.

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES, JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/l	Sulfate, mg/l	pH Temperature °C	Bromide, mg/l	Fluoride, mg/l	Nitrate-N, mg/l	Nitrate as NO ₃ , mg/l	Aluminum, mg/l	Arsenic, mg/l	Barium, mg/l	Boron, mg/l	Cadmium, mg/l	Calcium, mg/l	Chromium, mg/l	Cobalt, mg/l	Copper, mg/l	Iron, mg/l
S98-0468	EMP #3 Pump Blank Middle Sample	21-Oct-98	649	8.23	373	110	48	19.8	2.0	1.5	<0.05	---	---	---	---	0.19	---	40	---	---	<0.0025	0.77
S98-0062	EMP #3 Pump Blank Post Sample	24-Feb-98	738	8.2	420	98	60	---	0.7	2	<0.2	---	---	---	---	---	---	51	---	---	---	---
S98-0192	EMP #3 Pump Blank Post Sample	14-May-98	670	8.1	400	88	57	---	0.63	1.8	0.05	---	---	---	---	---	---	48	---	---	---	---
S98-0224	EMP #3 Pump Blank Post Sample	01-Jun-98	690	8.0	420	91	53	---	0.84	1.7	<0.05	---	---	---	---	---	---	50	---	---	---	---
S98-0298	EMP #3 Pump Blank Post Sample	11-Aug-98	641	8.13	392	95	54	19.8	<5	1.8	<2.5	---	---	---	---	---	---	47	---	---	---	---
S98-0065	EMP #3 Pump Blank Pre Sample	24-Feb-98	746	8.2	432	99	62.2	---	0.7	1.9	<0.2	---	---	---	---	---	---	52	---	---	---	---
S98-0156	EMP #3 Pump Blank Pre Sample	11-May-98	970	7.7	630	98	200	---	<2	1.8	<0.05	---	---	---	---	---	---	91	---	---	---	---
S98-0289	EMP #3 Pump Blank Pre Sample	10-Aug-98	676	7.84	458	96	57	19.9	<2.5	1.9	<1.25	---	---	---	---	---	---	47Jm	---	---	---	---
S99-0079	EMP #3 Pump Blank Before	23-Feb-99	1170	8.44	681	210	42	14.1	<2	1.7	<0.05	---	---	---	---	---	---	52	---	---	---	---
S99-0086	EMP #3 Pump Blank After	23-Feb-99	1610	8.66	981	350	45	13.5	<2	1.8	<0.05	---	---	---	---	---	---	51	---	---	---	---
M99-0003	EMP #3 Before Purging Wells	10-May-99	1120	7.86	646	210	51	22.3	0.6	1.5	<0.05	---	---	---	---	0.22	---	50	---	---	<0.0025	0.45
M99-0015	EMP #3 Middle	12-May-99	609	---	379	73	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0028	EMP #3 After Purging	14-May-99	599	8.27	356	66	53	24.0	0.5	1.8	<0.05	---	---	---	---	0.21	---	44	---	---	0.0060	0.76
M99-0084	EMP #3 Pump Blank Before	09-Aug-99	578	8.30	305	49	1.1	20.1	<0.2	<0.4	0.70	---	---	---	---	---	---	0.79	---	---	---	---
M99-0091	EMP #3 Pump Blank After	11-Aug-99	588	8.32	305	70	53	22.1	2.1	1.7	<0.05	---	---	---	---	---	---	45	---	---	---	---
M99-0180	EMP #3 Before Purging Wells	18-Oct-99	1070	7.37	673	140	200	20.7	0.65	1.7	0.29	---	0.043	0.0076	0.053	0.22	<0.002	88	<0.005	<0.005	0.0035	0.69
M99-0200	EMP #3 Middle	22-Oct-99	624	8.22	397	110	50	19.4	0.60	1.6	<0.05	---	0.033	0.0066	0.075	0.20	<0.002	44	<0.005	<0.005	<0.0025	0.72
M99-0207	EMP #3 After Purging	23-Oct-99	640	8.29	367	96	50	21.4	0.58	1.6	<0.05	---	0.059	0.0062	0.092	0.20	<0.002	50	<0.005	<0.005	<0.0025	0.89
S98-0064	Field Blank	24-Feb-98	2	5.8	<20	<0.2	<1	---	<0.2	<0.1	<0.2	---	---	---	---	---	---	<1	---	---	---	---
S98-0171	Field Blank	12-May-98	54	5.7	<20	<0.2	<1	---	<0.2	<0.1	<0.05	---	---	---	---	---	---	<1	---	---	---	---
S98-0223	Field Blank	01-Jun-98	3.2	6.0	<20	0.33	<1	---	<0.2	<0.1	<0.05	---	---	---	---	---	---	<1	---	---	---	---
S98-0291	Field Blank	10-Aug-98	20.7	9.56	31	<0.1	<2.0	19.3	<0.1	<0.10	<1.25	---	---	---	---	---	---	3.6	---	---	---	---
S98-0480	Field Blank	22-Oct-98	1.23	5.67	59	<0.1	<0.1	21.8	<0.2	<0.4	<0.05	---	---	---	---	0.016	---	<0.25	---	---	<0.0025	<0.05
S99-0077	Field Blank	23-Feb-99	2.46	5.35	<25	<0.1	<0.1	14.8	<0.2	<0.4	<0.05	---	---	---	---	---	---	<0.25	---	---	---	---
M99-0001	Field Blank	10-May-99	1.32	6.18	41	<0.1	<0.1	21.5	<0.2	<0.4	<0.05	---	---	---	---	<0.01	---	<0.25	---	---	<0.0025	<0.05
M99-0209	Field Blank	23-Oct-99	3.70	5.94	<15	0.32	<0.5	21.7	<0.2	<0.4	0.080	---	<0.025	<0.005	<0.0025	<0.01	<0.002	0.33	<0.005	<0.005	<0.0025	<0.05

Notes:

1. < : Denotes a sample value of less than the laboratory detection limit.
2. Jm : Estimated value—possible matrix effect.
3. * : Method blank had detectable levels of this component.
4. 1.2/<0.05 : NEL Lab result/Montgomery Watson Lab result.
5. P : Denotes sample was received with a pH greater than 14.

Table 2: SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO

SAMPLE DESCRIPTION	Sample Description	Sample Date	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
S98-0468	EMP #3 Pump Blank Middle Sample	21-Oct-98	—	12	0.047	—	—	—	4.0	14	—	95	—	<0.05	130	130	<25	<25	150
S98-0062	EMP #3 Pump Blank Post Sample	24-Feb-98	—	14	—	—	—	—	4	14	—	72	—	—	160	—	—	—	—
S98-0192	EMP #3 Pump Blank Post Sample	14-May-98	—	12	—	—	—	—	4	17	—	72	—	—	140	140	—	—	—
S98-0224	EMP #3 Pump Blank Post Sample	01-Jun-98	—	13	—	—	—	—	4	16	—	76	—	—	150	150	—	—	—
S98-0298	EMP #3 Pump Blank Post Sample	11-Aug-98	—	12	—	—	—	—	4.1	17	—	78	—	—	130	130	<25	<25	170
S98-0065	EMP #3 Pump Blank Pre Sample	24-Feb-98	—	14	—	—	—	—	4	13	—	75	—	—	161.8	—	—	—	—
S98-0156	EMP #3 Pump Blank Pre Sample	11-May-98	—	23	—	—	—	—	5	13	—	74	—	—	110	110	—	—	—
S98-0289	EMP #3 Pump Blank Pre Sample	10-Aug-98	—	12	—	—	—	—	4.2	19	—	79	—	—	140	140	<25	<25	170
S99-0079	EMP #3 Pump Blank Before	23-Feb-99	—	14	—	—	—	—	4.2	18	—	190	—	—	180	170	6	<25	180
S99-0086	EMP #3 Pump Blank After	23-Feb-99	—	14	—	—	—	—	4.7	18	—	270	—	—	180	160	16	<25	190
M99-0003	EMP #3 Before Purging Wells	10-May-99	—	14	0.040	—	—	—	4.3	22	—	170	—	0.15	160	160	<25	<25	180
M99-0015	EMP #3 Middle	12-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0028	EMP #3 After Purging	14-May-99	—	11	0.054	—	—	—	4.2	19	—	65	—	<0.05	150	150	<25	<25	150
M99-0084	EMP #3 Pump Blank Before	09-Aug-99	—	<0.25	—	—	—	—	<1	11	—	140	—	—	220	220	2	<25	2.8
M99-0091	EMP #3 Pump Blank After	11-Aug-99	—	11	—	—	—	—	3.9	18	—	77	—	—	130	130	<25	<25	160
M99-0180	EMP #3 Before Purging Wells	18-Oct-99	<0.005	21	0.051	<0.0002	0.0062	<0.02	5.6	25	<0.005	92	<0.005	0.11	96	96	<25	<25	310
M99-0200	EMP #3 Middle	22-Oct-99	<0.005	12	0.051	<0.0002	0.0069	<0.02	4.3	17	<0.005	80	<0.005	<0.05	120	120	<25	<25	160
M99-0207	EMP #3 After Purging	23-Oct-99	<0.005	13	0.058	<0.0002	0.0083	<0.02	4.4	20	<0.005	80	<0.005	<0.05	130	130	<25	<25	180
S98-0064	Field Blank	24-Feb-98	—	<1	—	—	—	—	<1	<0.05	—	<1	—	—	<5	—	—	—	—
S98-0171	Field Blank	12-May-98	—	<1	—	—	—	—	<1	<0.05	—	<1	—	—	<5	<5	—	—	—
S98-0223	Field Blank	01-Jun-98	—	<1	—	—	—	—	<1	<0.05	—	<1	—	—	<5	<5	—	—	—
S98-0291	Field Blank	10-Aug-98	—	<0.25	—	—	—	—	<0.25	<10	—	<0.25	—	—	<25	<25	<25	<25	9.0
S98-0480	Field Blank	22-Oct-98	—	<0.25	<0.0025	—	—	—	<1	<0.25	—	<0.25	—	<0.05	<25	<25	<25	<25	<0.5
S99-0077	Field Blank	23-Feb-99	—	<0.25	—	—	—	—	<1	<1	—	<0.25	—	—	<25	<25	<25	<25	<1
M99-0001	Field Blank	10-May-99	—	<0.25	<0.0025	—	—	—	<1	<0.2	—	<0.25	—	<0.05	<25	<25	<25	<25	<1
M99-0209	Field Blank	23-Oct-99	0.0062	<0.25	<0.0025	<0.0002	<0.005	<0.02	<1	<1	<0.005	<0.25	<0.005	<0.05	<25	<25	<25	<25	<1

Notes:

1. < : Denotes a sample value of less than the laboratory detection limit.
2. Jm : Estimated value—possible matrix effect.
3. * : Method blank had detectable levels of this component.
4. 1.2/<0.05 : NEL Lab result/Montgomery Watson Lab result.
5. P : Denotes sample was received with a pH greater than 12.

**TABLE 3: SUMMARY OF 1999 GROUNDWATER RECOVERY/DISPOSAL VOLUMES,
JAL NO. 4 PLANT, EL PASO ENERGY CORPORATION, LEA COUNTY, NEW MEXICO**

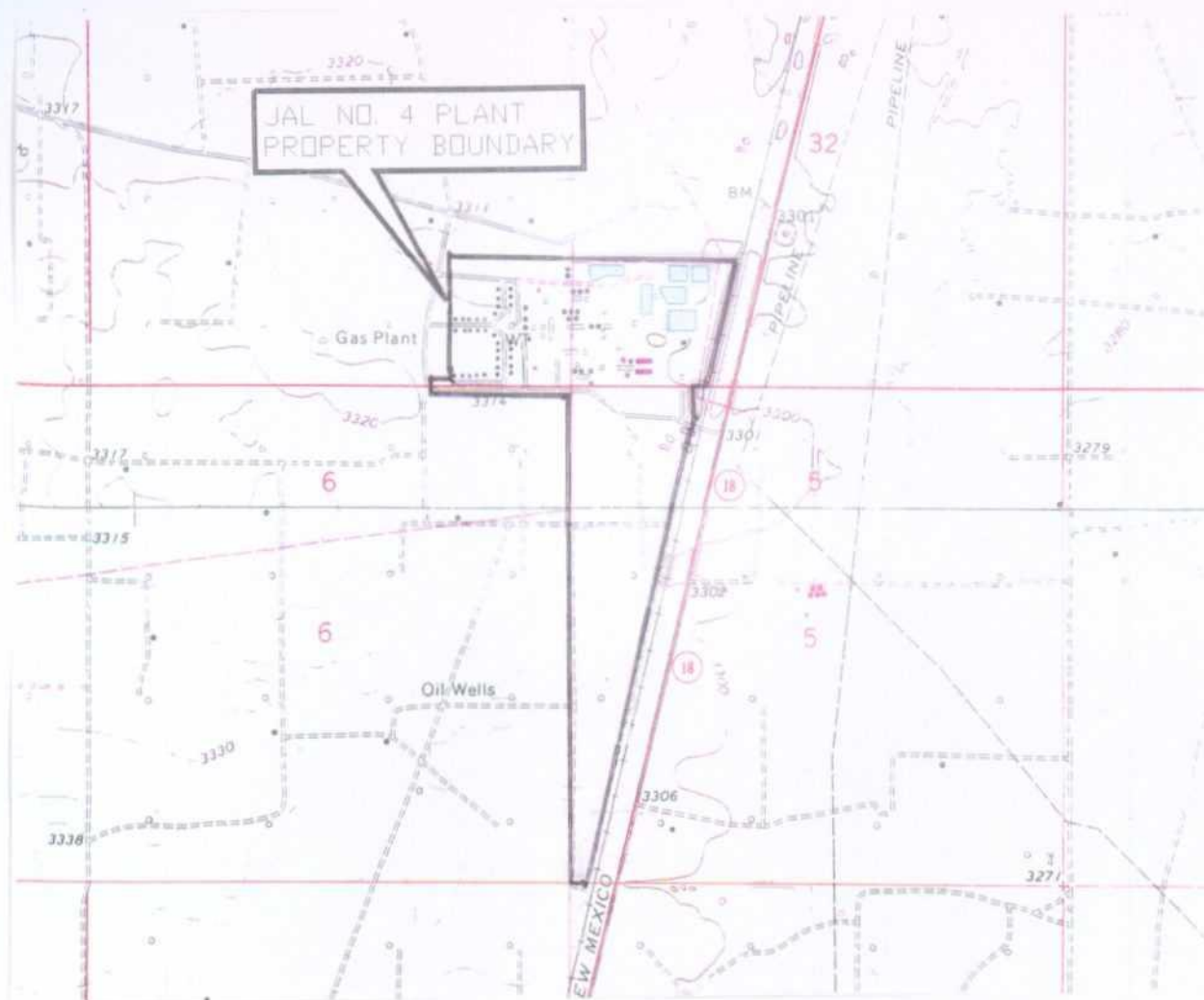
Month	CP-37 thru CP-42 Comb-S (RW1)			CP-37 thru CP-42 Comb-S (RW2)		
	Meter Readings		Difference (gallons)	Meter Readings		Difference (gallons)
	Present	Previous		Present	Previous	
Oct-99	95,200	0	95,200	0	0	0
Nov-99	210,630	95,200	115,430	0	0	0
Dec-99	319,280	210,630	108,650	0	0	0
	1999 Annual Total		319,280	1999 Annual Total		0
Jan-00	433,650	319,280	114,370	159,650	0	159,650
Feb-00		0	0		0	0
Mar-00		0	0		0	0
Apr-00		0	0		0	0
May-00		0	0		0	0
Jun-00		0	0		0	0
Jul-00		0	0		0	0
Aug-00		0	0		0	0
Sep-00		0	0		0	0
Oct-00		0	0		0	0
Nov-00		0	0		0	0
Dec-00		0	0		0	0
	2000 Annual Total		114,370	2000 Annual Total		159,650

FIGURES

R 37 E

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AFTER U.S.G.S. 7.5 MIN. TOPO. QUAD., RATTLESNAKE CANYON, N.M., 1979, AND JAL NW, N.M., 1979



NEW MEXICO

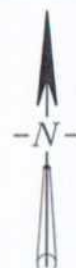
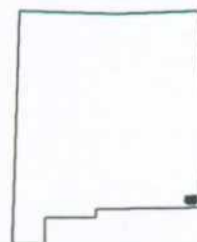


Figure Title: SITE LOCATION AND TOPOGRAPHIC FEATURES

Client: EL PASO ENERGY CORPORATION

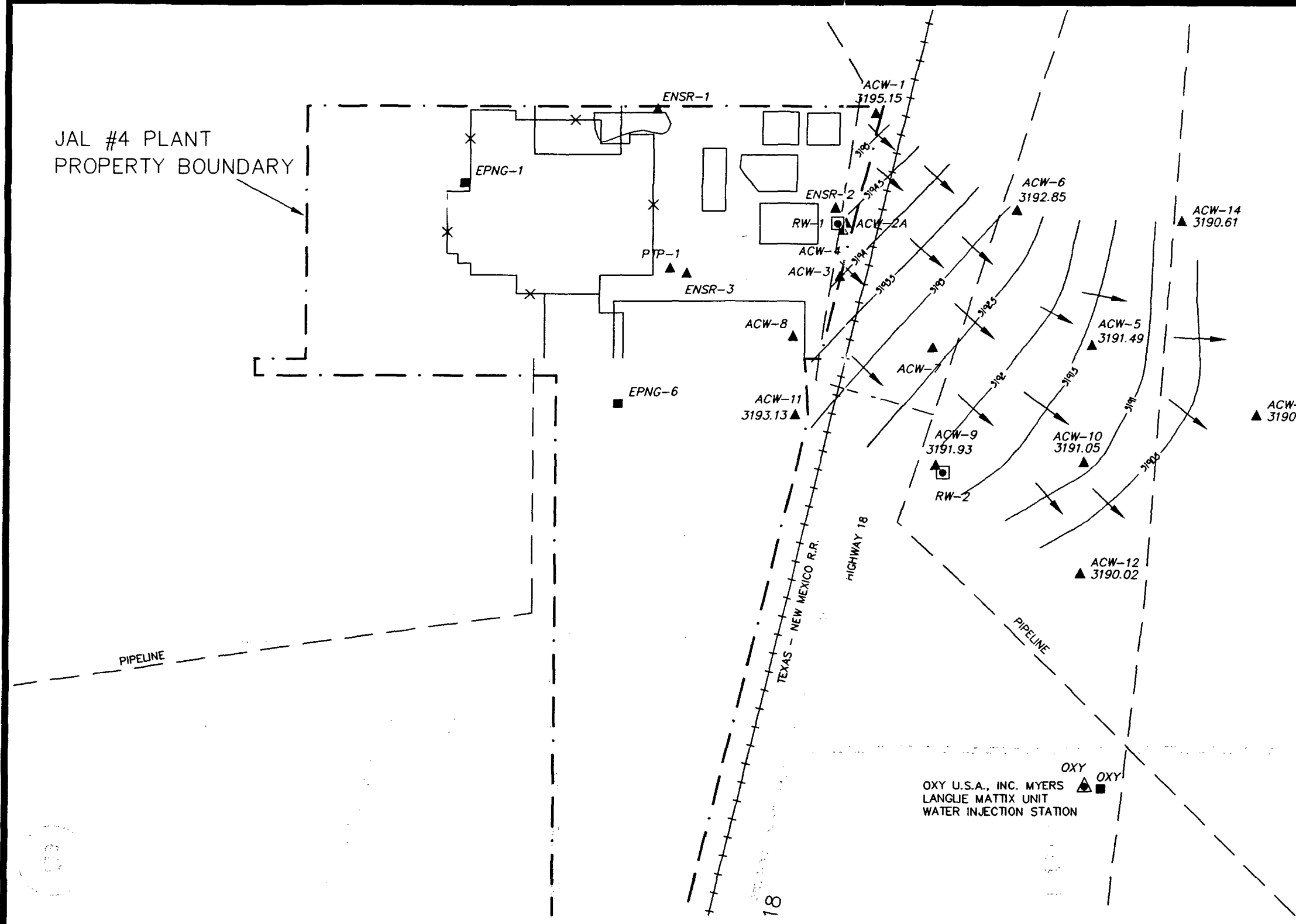
Document Title: 1999 ANNUAL GROUNDWATER REMEDIATION REPORT

Location: LEA COUNTY, NEW MEXICO
JAL NO. 4 PLANT

**ROBERTS/SCHORNICK
& ASSOCIATES, INC.**
Environmental Consultants
2488 East 81st Street/Suite 810
Tulsa, Oklahoma 74137
(918) 498-0059

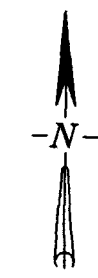
DATE: 2/4/00	PREPARED BY: GHR
SCALE: AS SHOWN	CHECKED BY: GHR
PROJECT NO: 97171.01 F01	DRAFTED BY: MKA
	FIGURE NO.: 1

JAL #4 PLANT
PROPERTY BOUNDARY

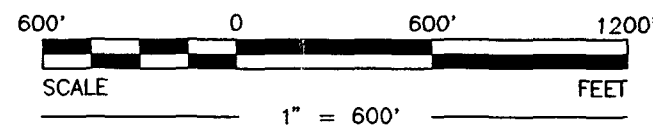


LEGEND

- ▲ ACW-5 3191.49 GROUNDWATER MONITOR WELL AND GROUNDWATER ELEVATION WITHIN UPPERMOST GROUNDWATER SYSTEM, ON FEBRUARY 23, 1999, FEET AMSL
- EPNG-1 WATER SUPPLY WELL
- RW-2 GROUNDWATER RECOVERY WELL
- ▲ OXY INJECTION WELL
- ✕ FENCE
- SECONDARY ROAD
- RAILROAD TRACK
- PIPELINE
- CONTOUR OF GROUNDWATER ELEVATION WITHIN UPPERMOST GROUNDWATER SYSTEM ON FEBRUARY 23, 1999, FEET AMSL
- DIRECTION OF GROUNDWATER FLOW

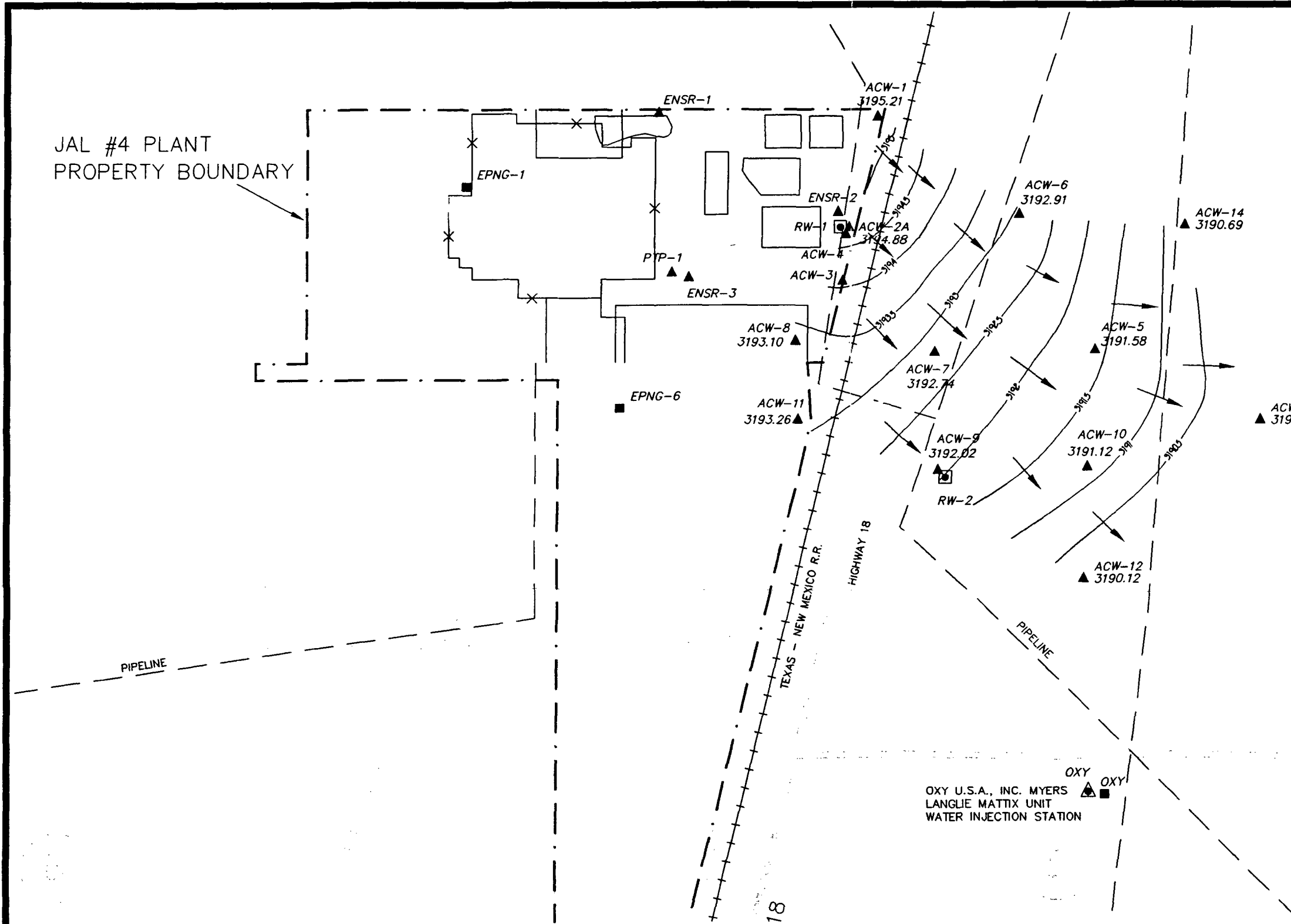


NOTE:
JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO



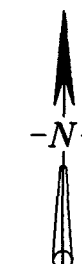
Client: EL PASO ENERGY CORP.		Figure Title: GROUNDWATER POTENTIOMETRIC SURFACE OF UPPERMOST GROUNDWATER SYSTEM ON FEBRUARY 23, 1999	
Location: JAL #4 PLANT LEA COUNTY, NEW MEXICO		Document Title: 1999 ANNUAL GROUNDWATER REMEDIATION REPORT	
ROBERTS/SCHORNICK & ASSOCIATES, INC. Environmental Consultants 2488 East 81st Street, Suite 810 Tulsa, Oklahoma 74117 (918) 486-0059		DATE: 2/4/2000	PREPARED BY: BEM
		SCALE: 1" = 600'	CHECKED BY: GHR
		PROJECT NO: 9717101 M12	DRAFTED BY: MKA
			FIGURE NO.: 2

JAL #4 PLANT
PROPERTY BOUNDARY

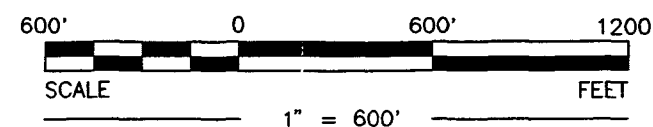


LEGEND

- ▲ ACW-5 3191.58 GROUNDWATER MONITOR WELL AND GROUNDWATER ELEVATION WITHIN UPPERMOST GROUNDWATER SYSTEM, ON MAY 11 - 14, 1999, FEET AMSL
- EPNG-1 WATER SUPPLY WELL
- RW-2 GROUNDWATER RECOVERY WELL
- ▲ OXY INJECTION WELL
- ✕ FENCE
- SECONDARY ROAD
- +++ RAILROAD TRACK
- - - PIPELINE
- CONTOUR OF GROUNDWATER ELEVATION WITHIN UPPERMOST GROUNDWATER SYSTEM ON MAY 11 - 14, 1999, FEET AMSL
- DIRECTION OF GROUNDWATER FLOW

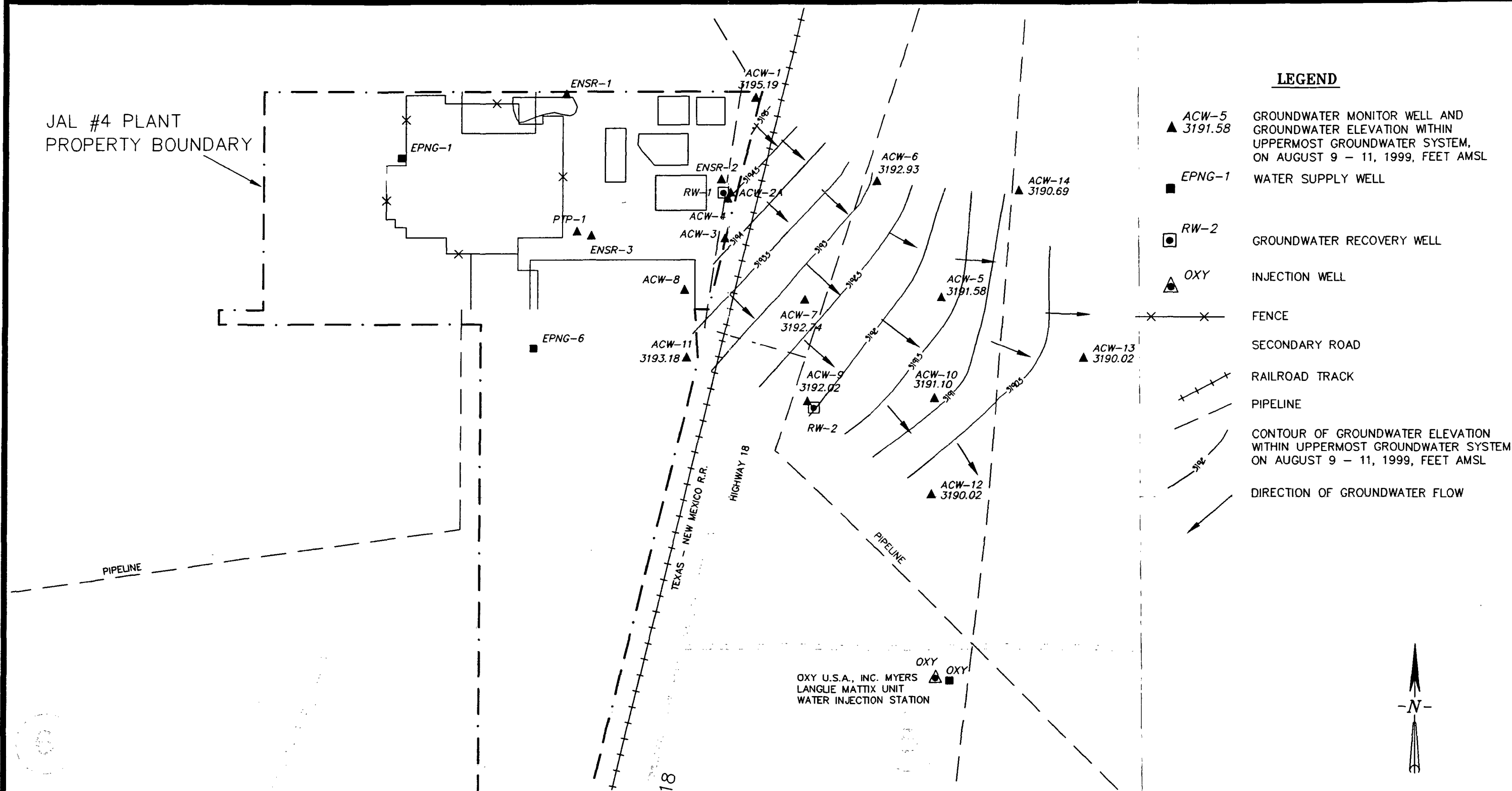


NOTE:
JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO



Client:	EL PASO ENERGY CORP.	Figure Title:	GROUNDWATER POTENTIOMETRIC SURFACE OF UPPERMOST GROUNDWATER SYSTEM ON MAY 11 - 14, 1999
Location:	JAL #4 PLANT LEA COUNTY, NEW MEXICO	Document Title:	1999 ANNUAL GROUNDWATER REMEDIATION REPORT
ROBERTS/SCHORNICK & ASSOCIATES, INC. Environmental Consultants 2408 East 61st Street, Suite 610 Tulsa, Oklahoma 74137 (918) 406-0059		DATE:	2/4/2000
		SCALE:	1" = 600'
		PROJECT NO.:	9717101 M14
		FIGURE NO.:	3
		PREPARED BY:	BEM
		CHECKED BY:	GHR
		DRAFTED BY:	MKA

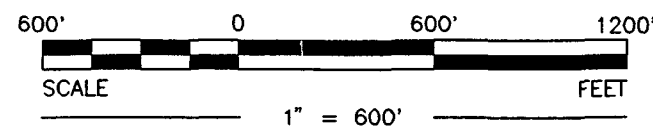
JAL #4 PLANT
PROPERTY BOUNDARY



LEGEND

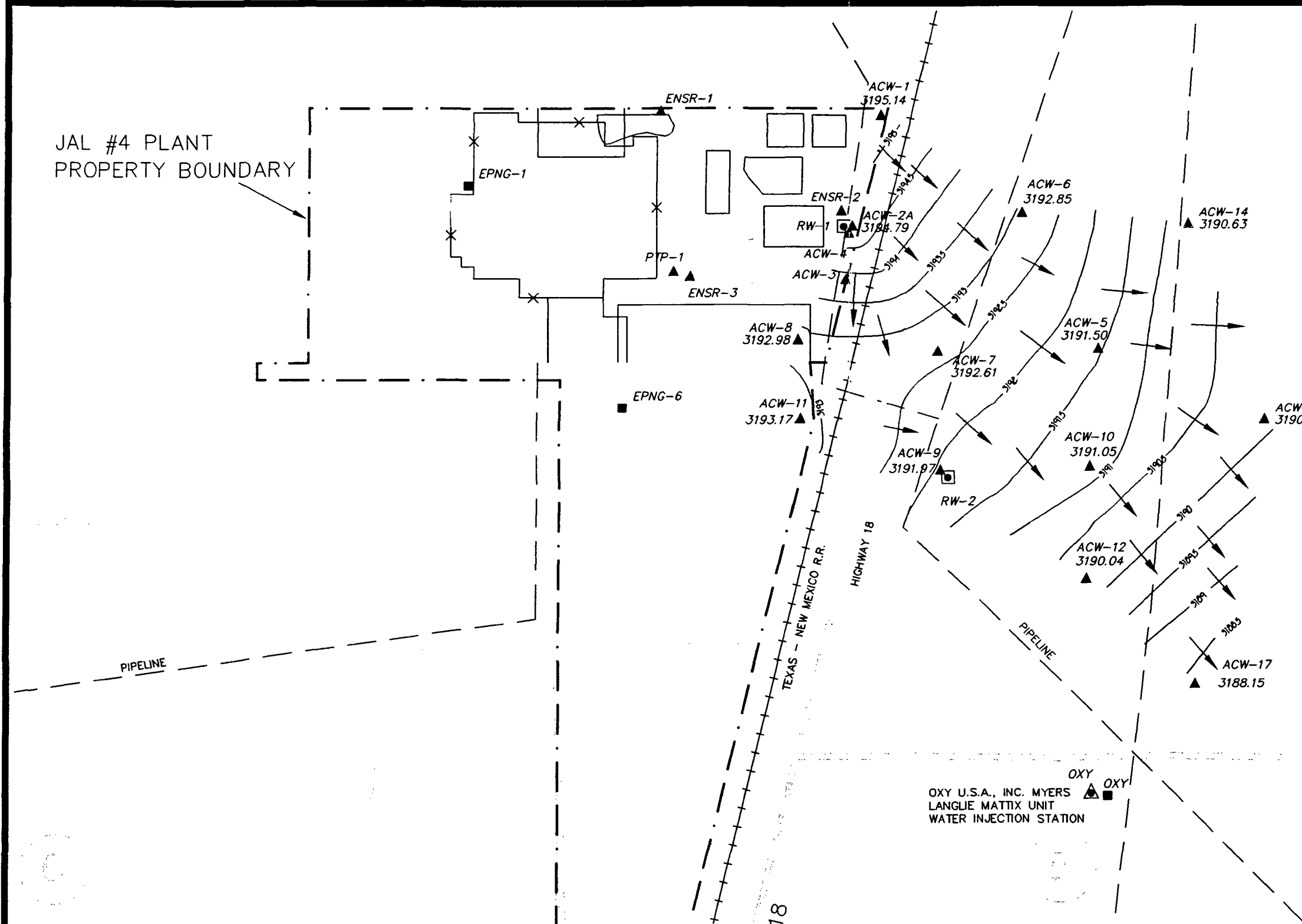
- ▲ ACW-5 3191.58 GROUNDWATER MONITOR WELL AND GROUNDWATER ELEVATION WITHIN UPPERMOST GROUNDWATER SYSTEM, ON AUGUST 9 - 11, 1999, FEET AMSL
- EPNG-1 WATER SUPPLY WELL
- RW-2 GROUNDWATER RECOVERY WELL
- ▲ OXY INJECTION WELL
- × FENCE
- SECONDARY ROAD
- RAILROAD TRACK
- PIPELINE
- CONTOUR OF GROUNDWATER ELEVATION WITHIN UPPERMOST GROUNDWATER SYSTEM ON AUGUST 9 - 11, 1999, FEET AMSL
- DIRECTION OF GROUNDWATER FLOW

NOTE:
JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO



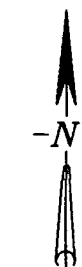
Client: EL PASO ENERGY CORP.		Figure Title: GROUNDWATER POTENTIOMETRIC SURFACE OF UPPERMOST GROUNDWATER SYSTEM ON AUGUST 9 - 11, 1999	
Location: JAL #4 PLANT LEA COUNTY, NEW MEXICO		Document Title: 1999 ANNUAL GROUNDWATER REMEDIATION REPORT	
ROBERTS/SCHORNICK & ASSOCIATES, INC. Environmental Consultants 2488 East 81st Street, Suite 610 Tulsa, Oklahoma 74137 (918) 496-0066		DATE: 2/4/2000	PREPARED BY: BEM
		SCALE: 1" = 600'	CHECKED BY: GHR
		PROJECT NO: 9717101 M15	DRAFTED BY: MKA
		FIGURE NO.: 4	

JAL #4 PLANT
PROPERTY BOUNDARY

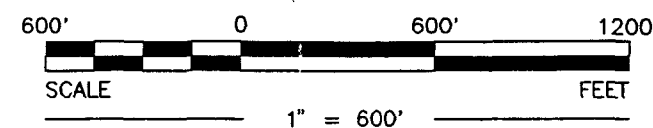


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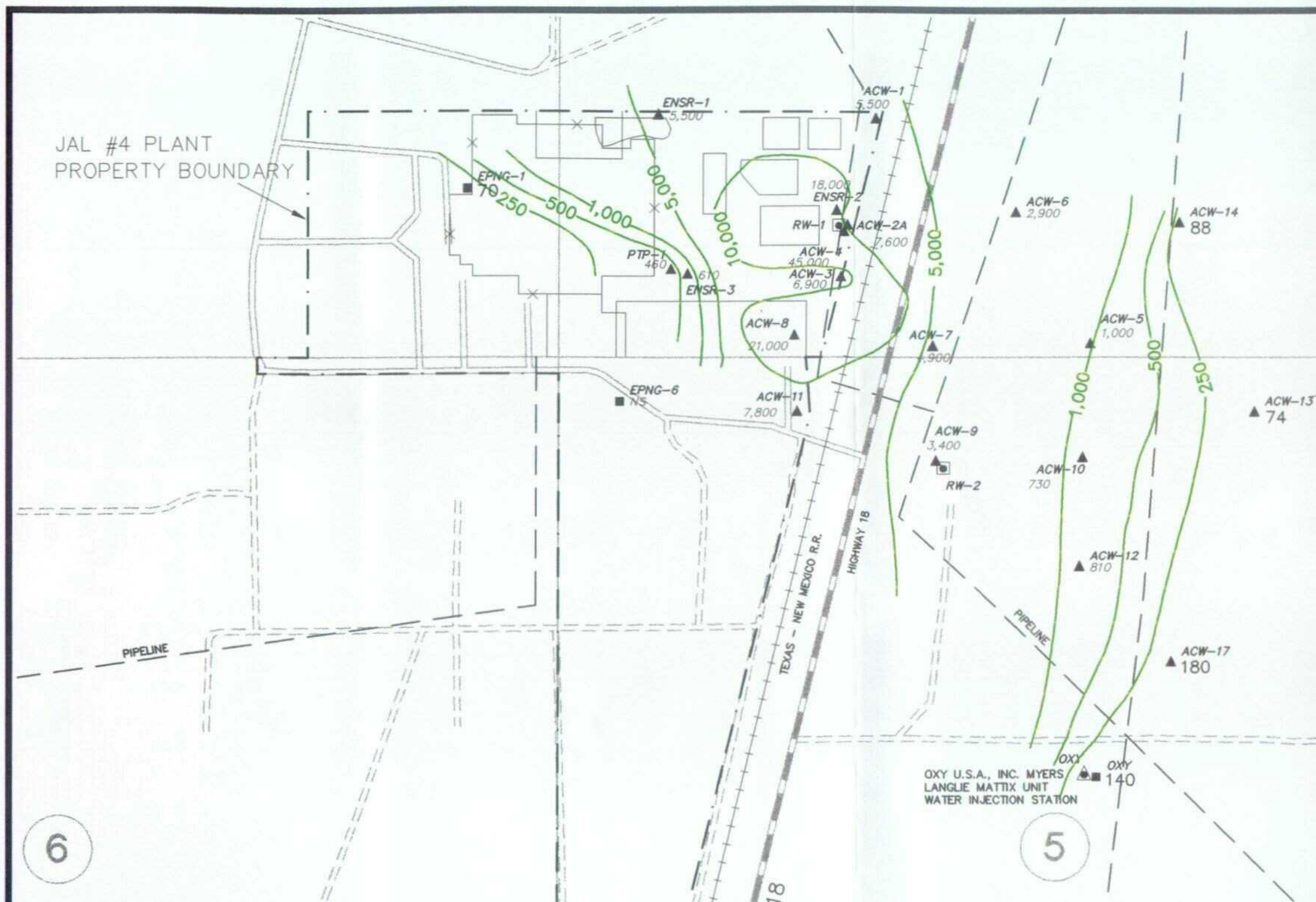
- ▲ ACW-5 3191.50 GROUNDWATER MONITOR WELL AND GROUNDWATER ELEVATION WITHIN UPPERMOST GROUNDWATER SYSTEM, ON OCTOBER 18 - 23, 1999, FEET AMSL
- EPNG-1 WATER SUPPLY WELL
- RW-2 GROUNDWATER RECOVERY WELL
- ▲ OXY INJECTION WELL
- ✕ FENCE
- SECONDARY ROAD
- RAILROAD TRACK
- PIPELINE
- CONTOUR OF GROUNDWATER ELEVATION WITHIN UPPERMOST GROUNDWATER SYSTEM ON OCTOBER 18 - 23, 1999, FEET AMSL
- DIRECTION OF GROUNDWATER FLOW



NOTE:
JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO



Client: EL PASO ENERGY CORP.		Figure Title: GROUNDWATER POTENTIOMETRIC SURFACE OF UPPERMOST GROUNDWATER SYSTEM ON OCTOBER 18-23, 1999	
Location: JAL #4 PLANT LEA COUNTY, NEW MEXICO		Document Title: 1999 ANNUAL GROUNDWATER REMEDIATION REPORT	
ROBERTS/SCHORNICK & ASSOCIATES, INC. Environmental Consultants 2400 East 61st Street, Suite 610 Tulsa, Oklahoma 74137 (918) 496-0059		DATE: 2/4/2000	PREPARED BY: BEM
		SCALE: 1" = 600'	CHECKED BY: GHR
		PROJECT NO: 9717101 M13	DRAFTED BY: MKA
			FIGURE NO.: 5



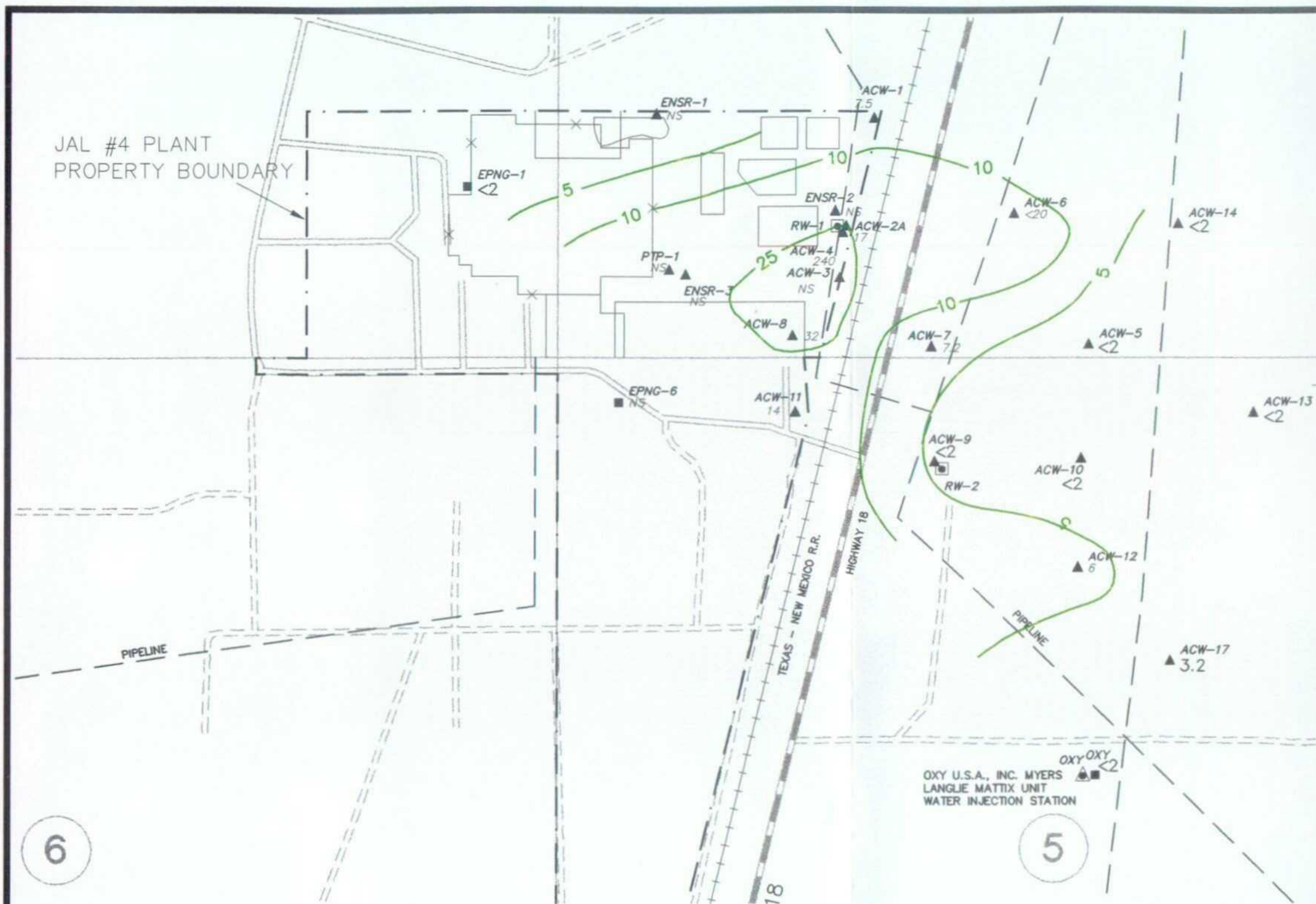
- LEGEND**
- ▲ ACW-5 1,000 GROUNDWATER MONITOR WELL AND CONCENTRATION OF CHLORIDE IN GROUNDWATER, mg/L
 - EPNG-1 70 WATER SUPPLY WELL AND CONCENTRATION OF CHLORIDE IN GROUNDWATER, mg/L
 - RW-2 GROUNDWATER RECOVERY WELL
 - ▲ OXY INJECTION WELL
 - × FENCE
 - SECONDARY ROAD
 - RAILROAD TRACK
 - PIPELINE
 - 250 CONTOUR LINE SHOWING EQUAL CONCENTRATIONS OF CHLORIDE IN GROUNDWATER, mg/L

- NOTES:**
- 1) CHLORIDE CONCENTRATIONS SHOWN ARE THE HIGHEST LEVELS DETECTED IN GROUNDWATER IN EACH WELL DURING THE 1999 MONITORING PROGRAM
 - 2) EPA'S SECONDARY DRINKING WATER STANDARD SMCL FOR PUBLIC WATER SUPPLY SYSTEMS IS 250 mg/L

NOTE:
JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO

600' 0 600' 1200'
SCALE 1" = 600' FEET

Client:	EL PASO ENERGY CORP.	Figure Title:	ISOPLETH OF CHLORIDE CONCENTRATIONS IN GROUNDWATER IN 1999
Location:	JAL #4 PLANT LEA COUNTY, NEW MEXICO	Document Title:	1999 ANNUAL GROUNDWATER REMEDIATION REPORT
ROBERTS/SCHORNICK & ASSOCIATES, INC. Environmental Consultants 2400 East 61st Street/Suite 610 Tulsa, Oklahoma 74137 (918) 496-0059		DATE:	2/4/00
		PREPARED BY:	BEM
		CHECKED BY:	BEM
		DRAFTED BY:	MKA
		PROJECT NO:	9717101 M16
		FIGURE NO.:	6



- LEGEND**
- ▲ ACW-5 <2 GROUNDWATER MONITOR WELL AND CONCENTRATION OF BENZENE IN GROUNDWATER, ug/L
 - EPNG-1 <2 WATER SUPPLY WELL AND CONCENTRATION OF BENZENE IN GROUNDWATER, ug/L
 - RW-2 GROUNDWATER RECOVERY WELL
 - ▲ OXY INJECTION WELL
 - FENCE
 - SECONDARY ROAD
 - RAILROAD TRACK
 - PIPELINE
 - ~ CONTOUR LINE SHOWING EQUAL CONCENTRATIONS OF BENZENE IN GROUNDWATER, ug/L
- NOTES:**
- 1) BENZENE CONCENTRATIONS SHOWN ARE THE HIGHEST LEVELS DETECTED IN GROUNDWATER IN EACH WELL DURING THE 1999 MONITORING PROGRAM
 - 2) EPA'S PRIMARY DRINKING WATER STANDARD MCL FOR PUBLIC WATER SUPPLY SYSTEMS IS 5.0 ug/L

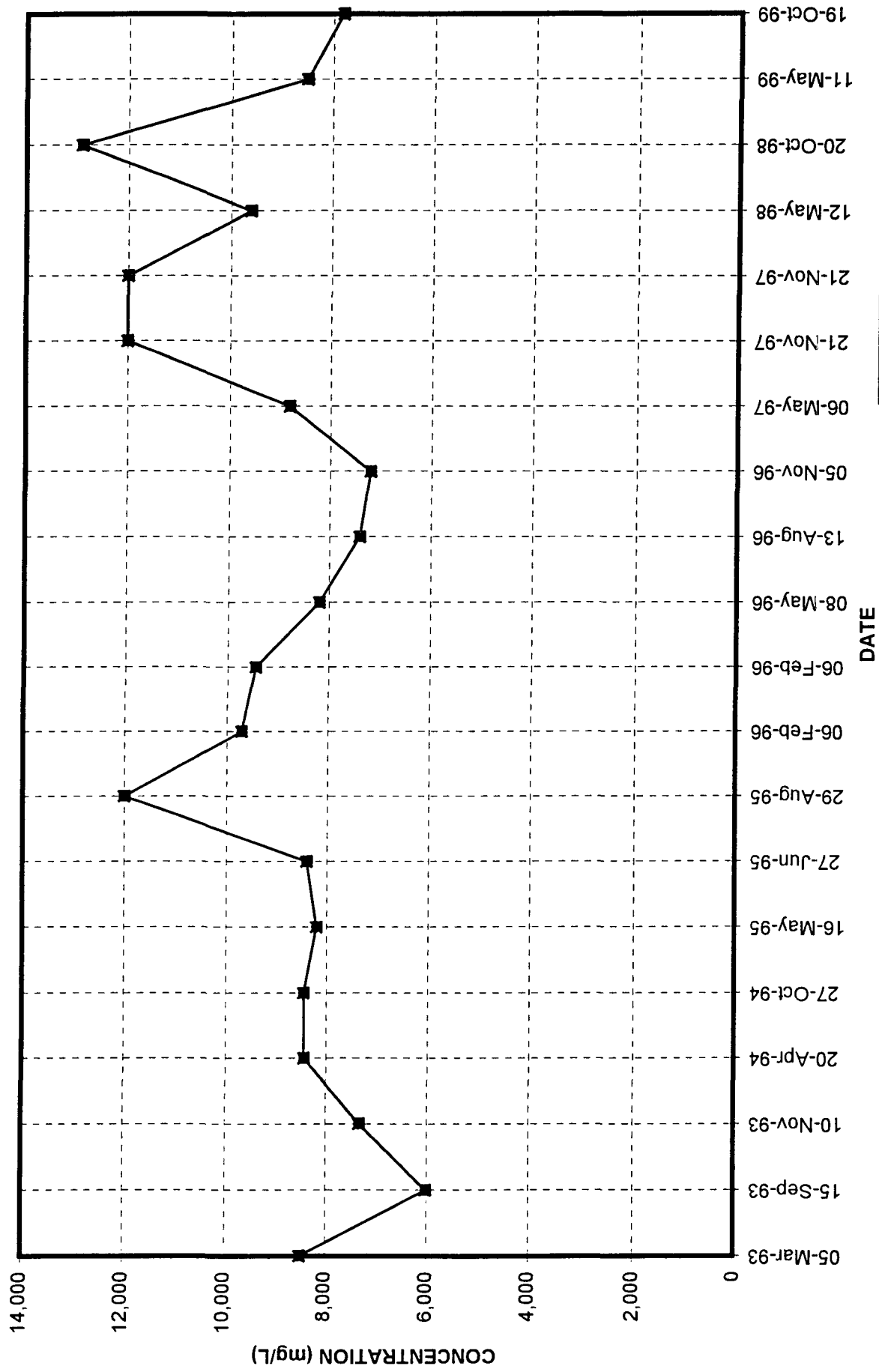
NOTE:
JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO

600' 0 600' 1200'
SCALE 1" = 600' FEET

Client:	EL PASO ENERGY CORP.	Figure Title:	ISOPLETH OF BENZENE CONCENTRATIONS IN GROUNDWATER IN 1999
Location:	JAL #4 PLANT LEA COUNTY, NEW MEXICO	Document Title:	1999 ANNUAL GROUNDWATER REMEDIATION REPORT
ROBERTS/SCHORNICK & ASSOCIATES, INC. Environmental Consultants 2485 East 81st Street, Suite 810 Tulsa, Oklahoma 74137 (918) 496-0059		DATE:	2/4/00
		SCALE:	1"=600'
		PROJECT NO.:	9717101 M17
		FIGURE NO.:	7
		PREPARED BY:	BEM
		CHECKED BY:	BEM
		DRAFTED BY:	MKA

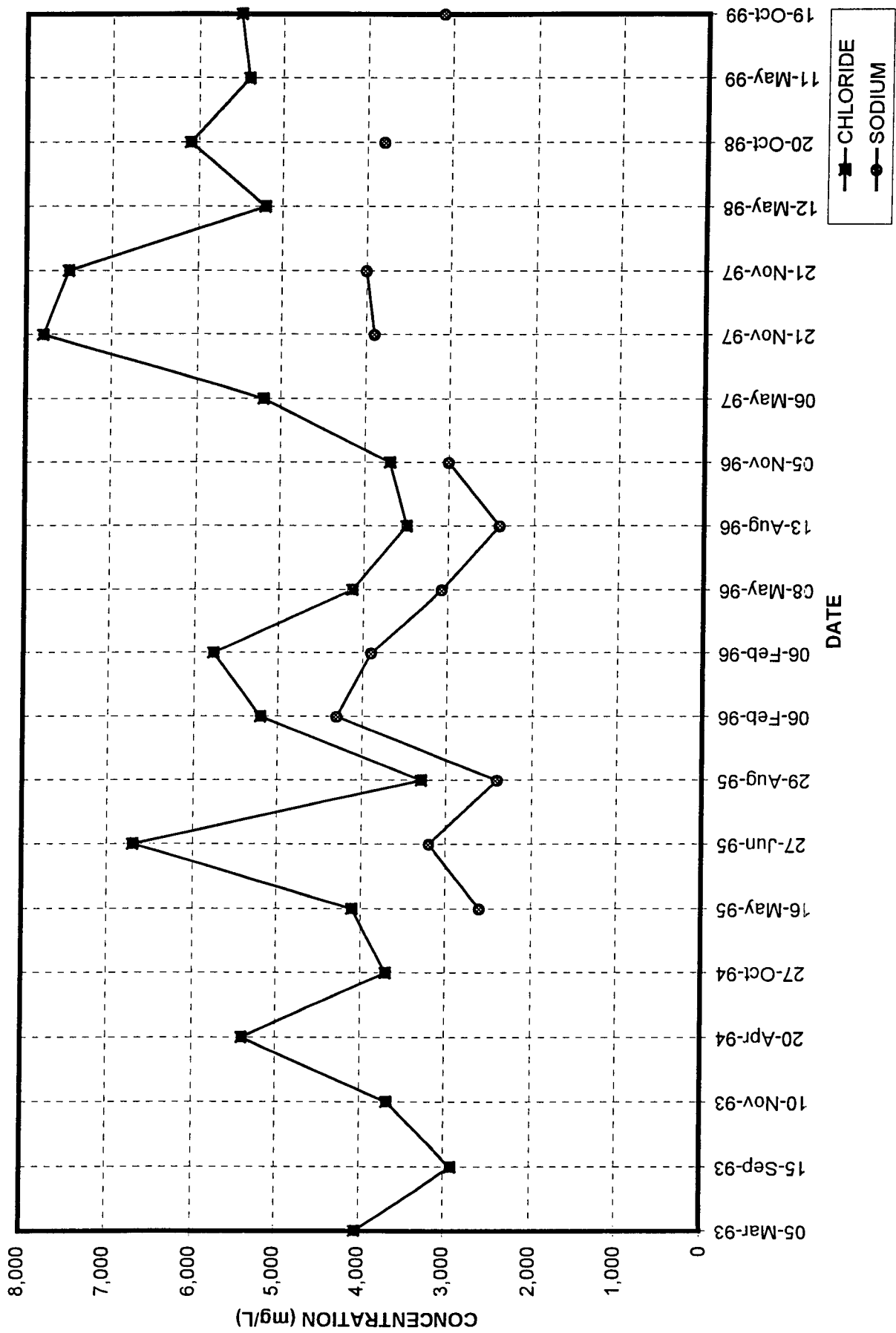
GRAPHS

MONITOR WELL ACW-01



GRAPH 1

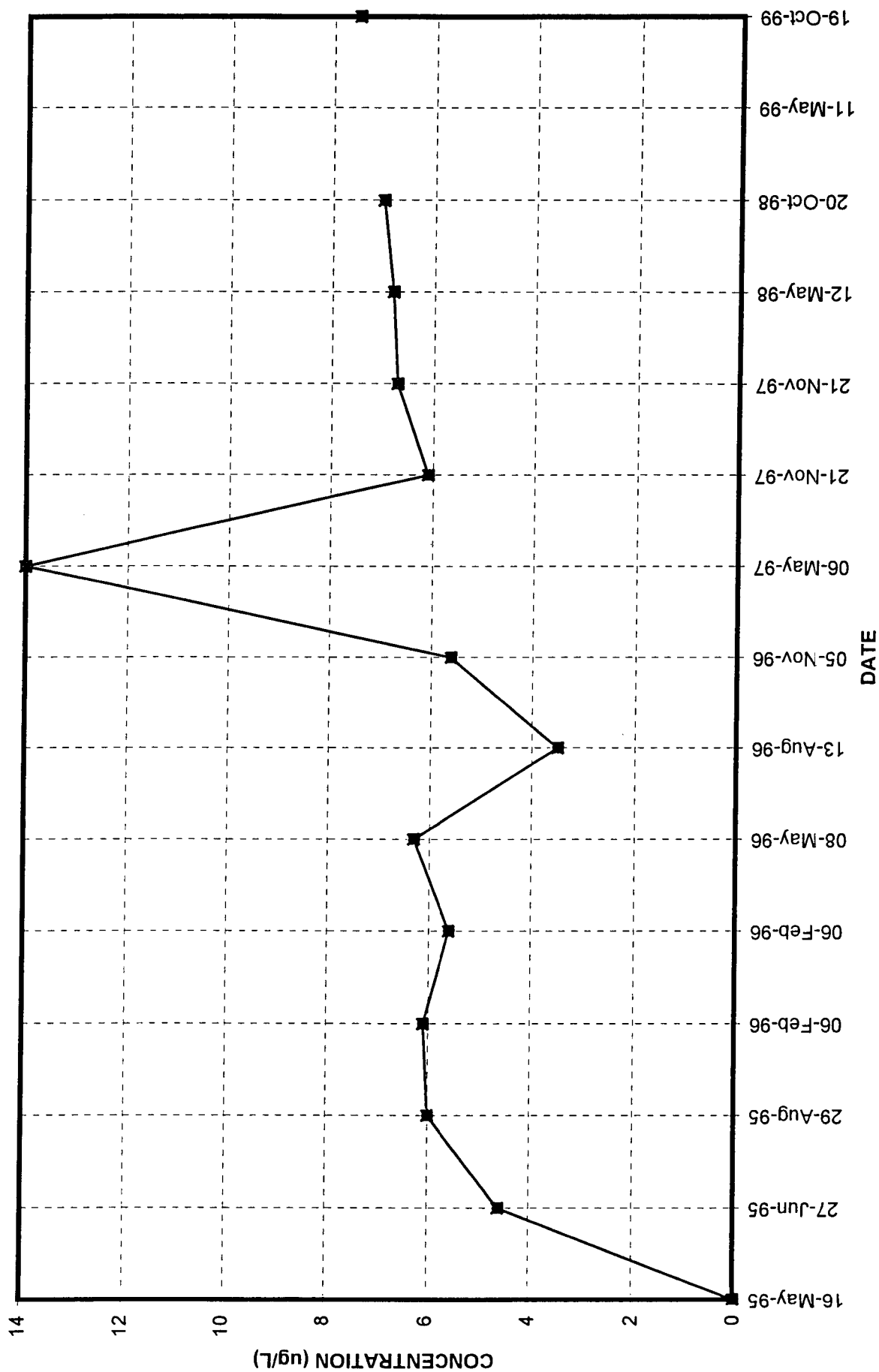
MONITOR WELL ACW-01



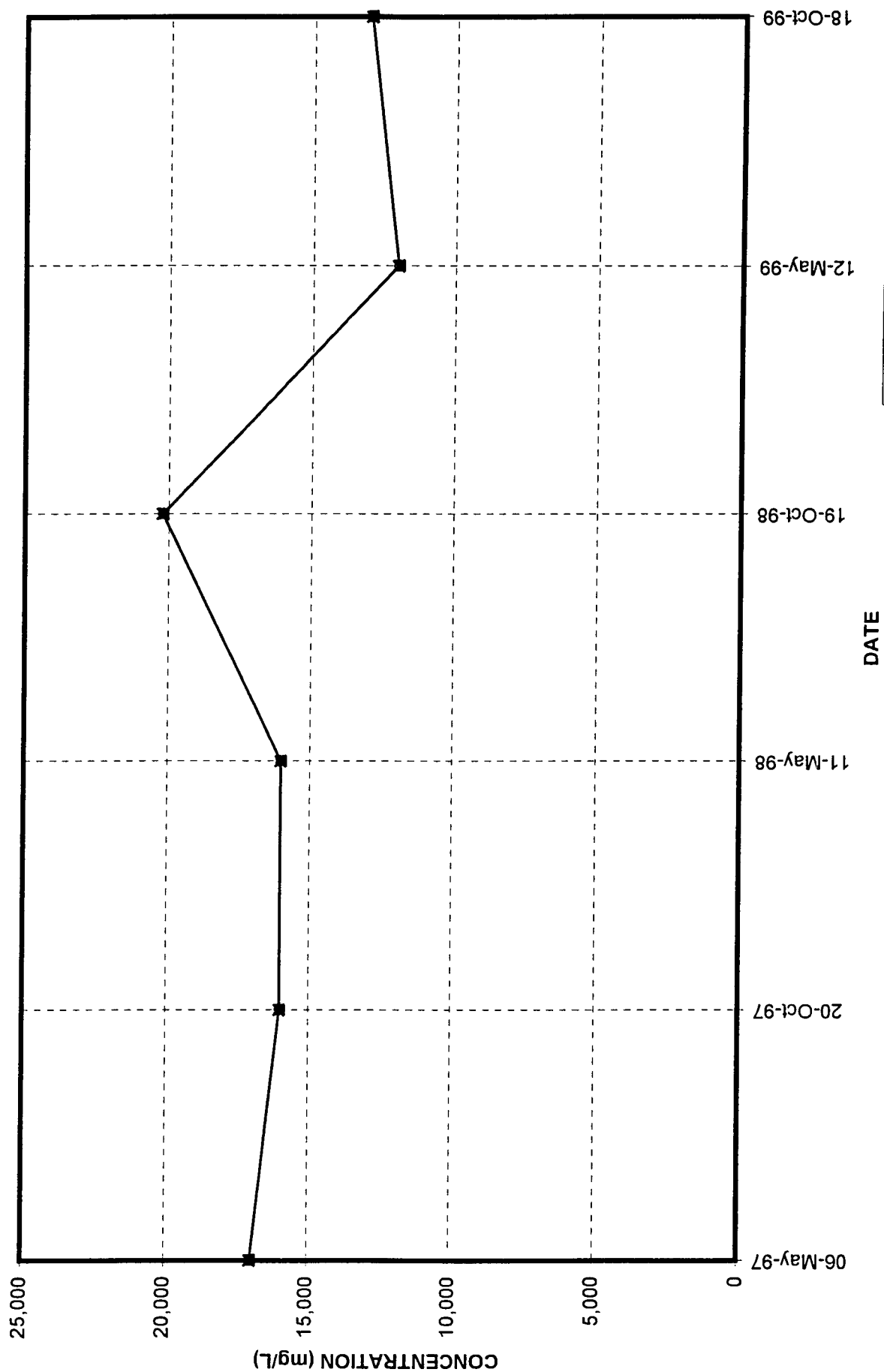
GRAPH 2

GRAPH 3

MONITOR WELL ACW-01



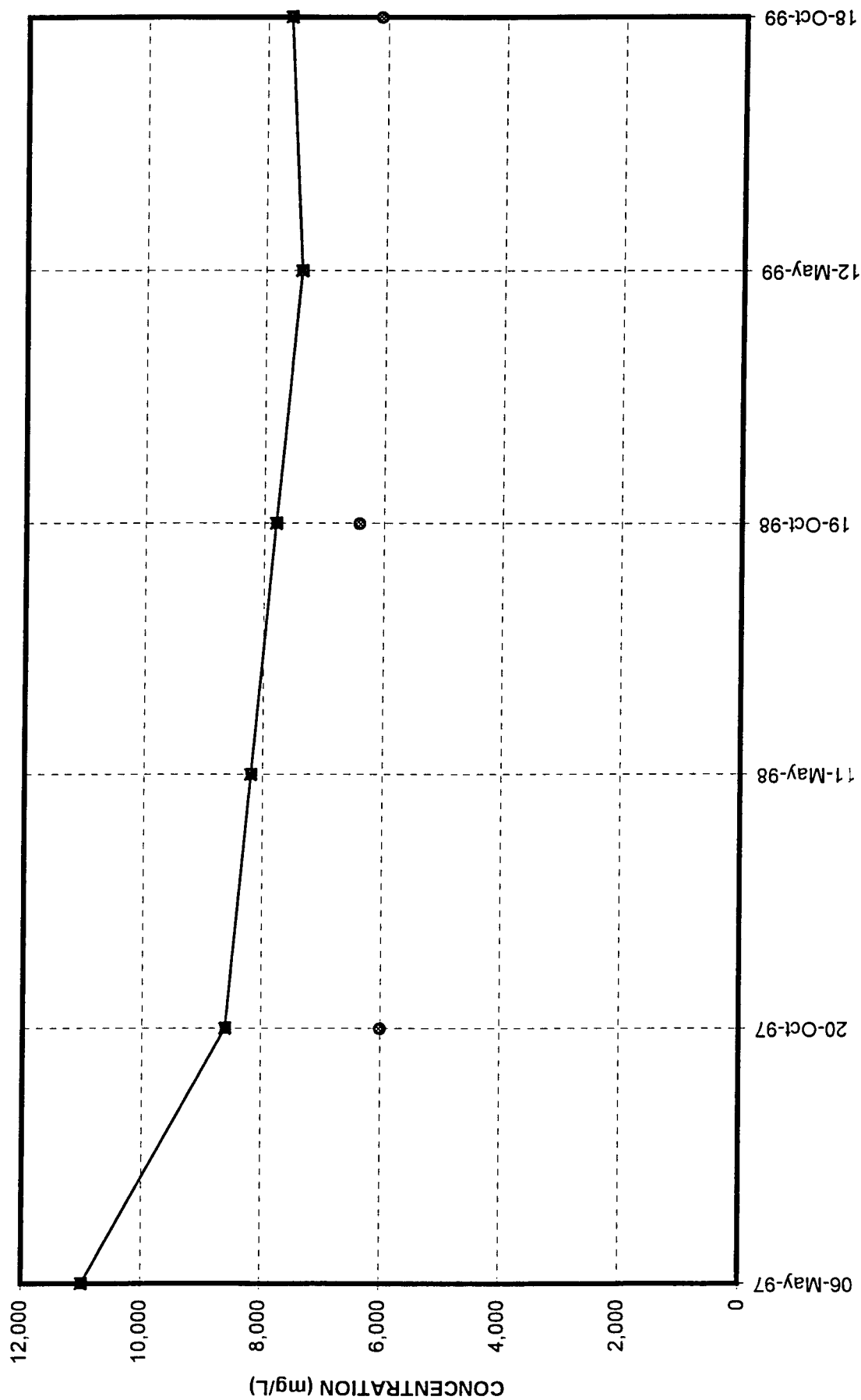
MONITOR WELL ACW-02A



—■— TOTAL DISSOLVED SOLIDS

GRAPH 4

MONITOR WELL ACW-02A



DATE



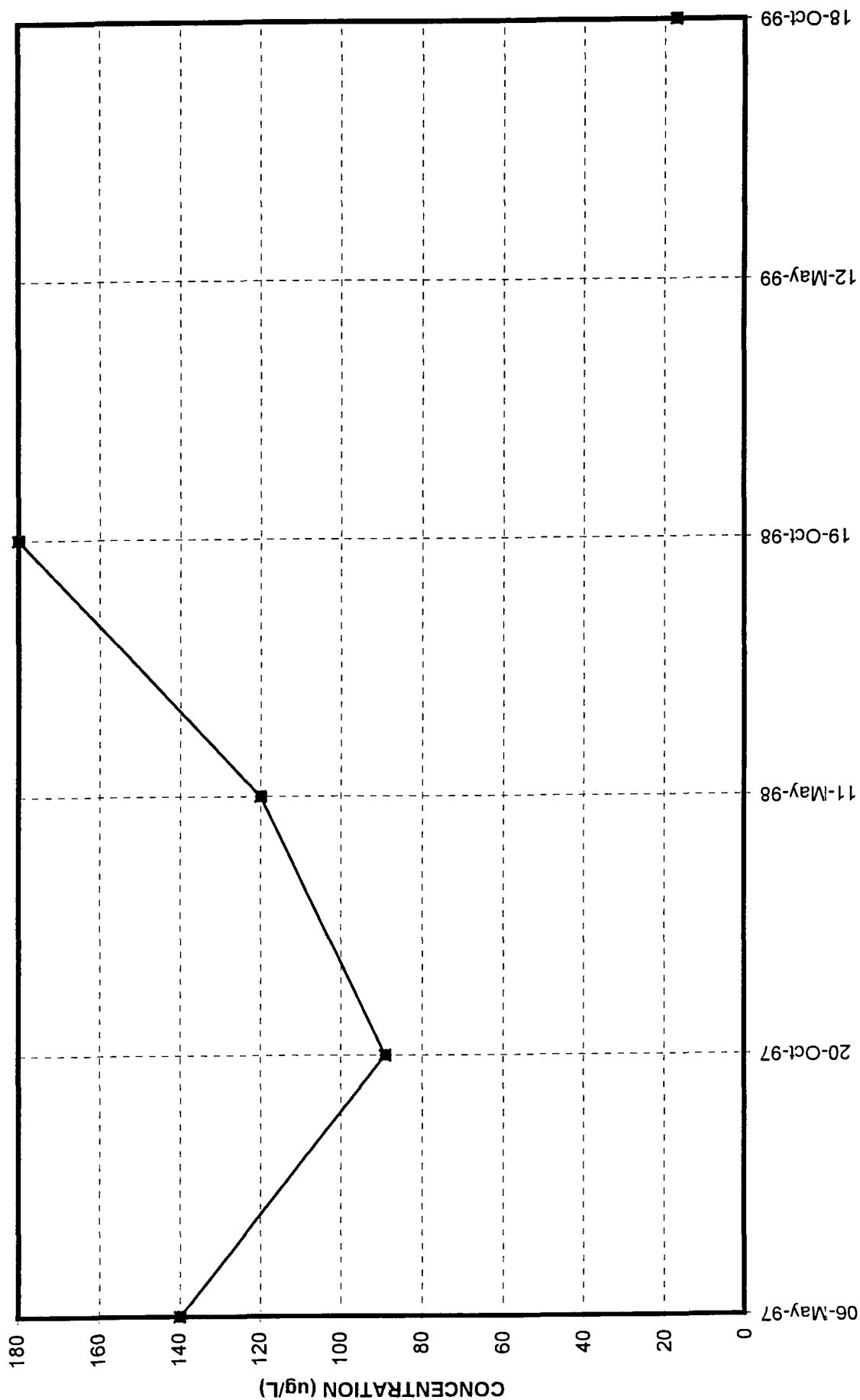
GRAPH 5

GRAPH 6

■ BENZENE

DATE

MONITOR WELL ACW-02A

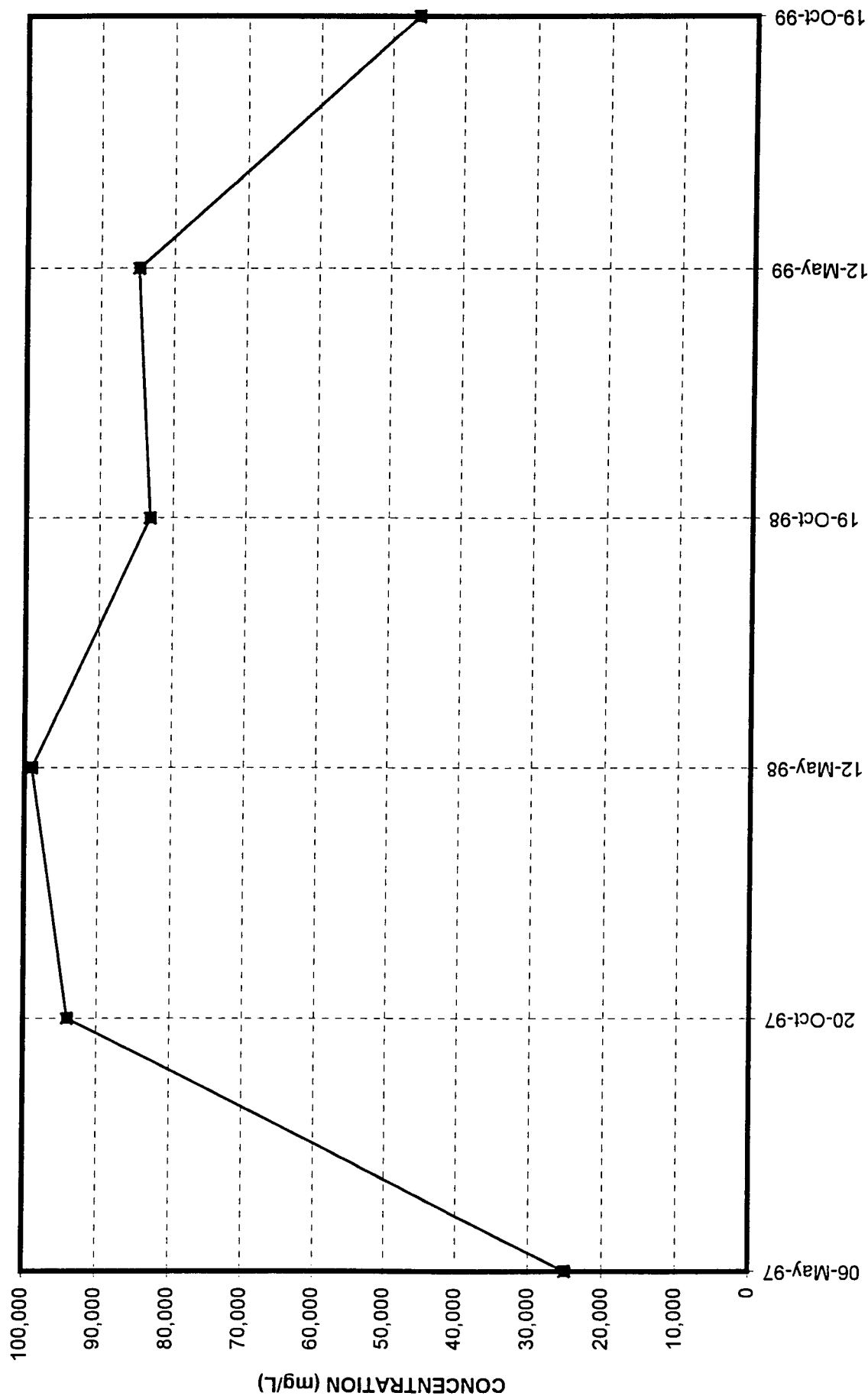


GRAPH 7

—■— TOTAL DISSOLVED SOLIDS

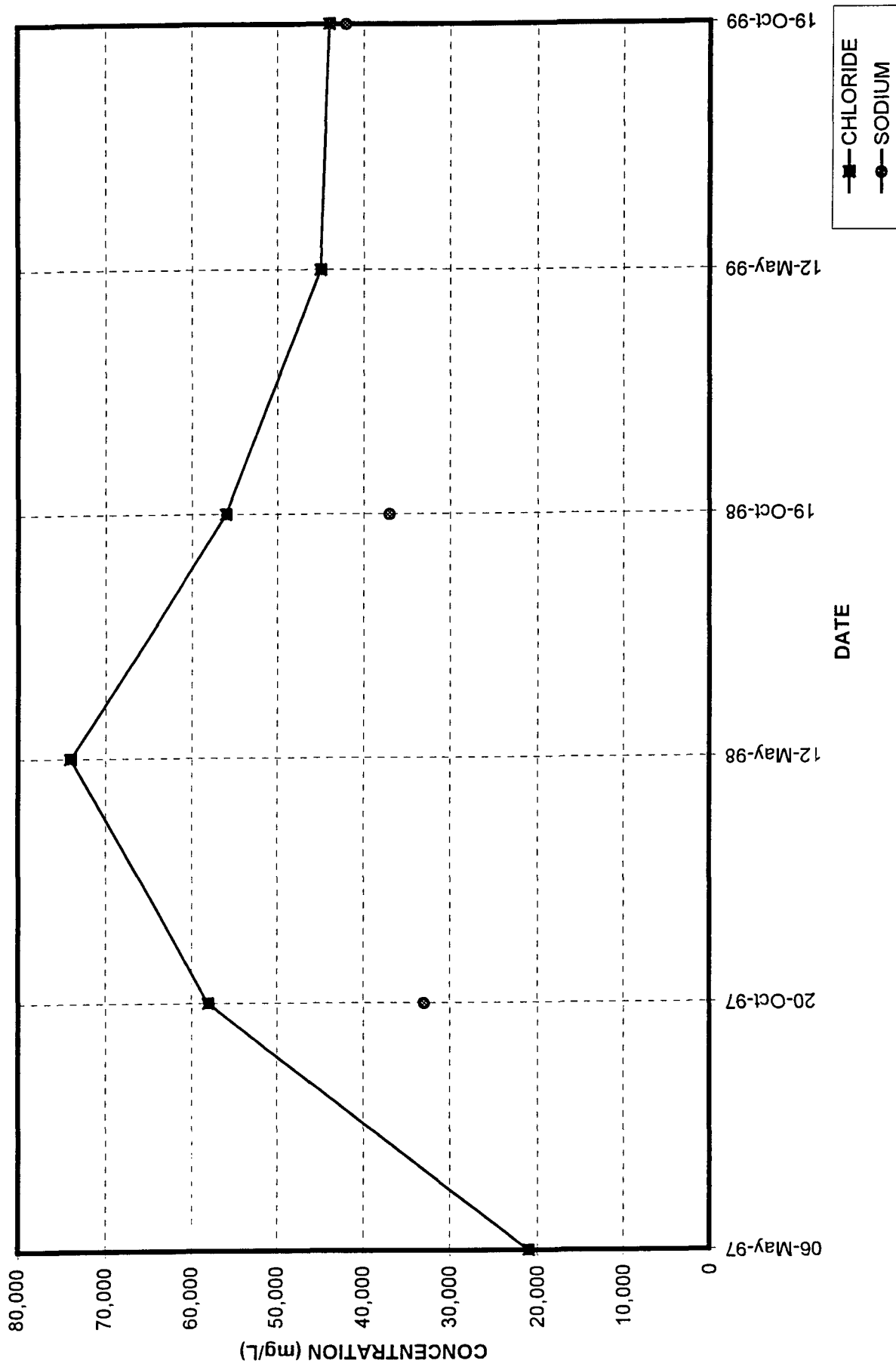
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MONITOR WELL ACW-04

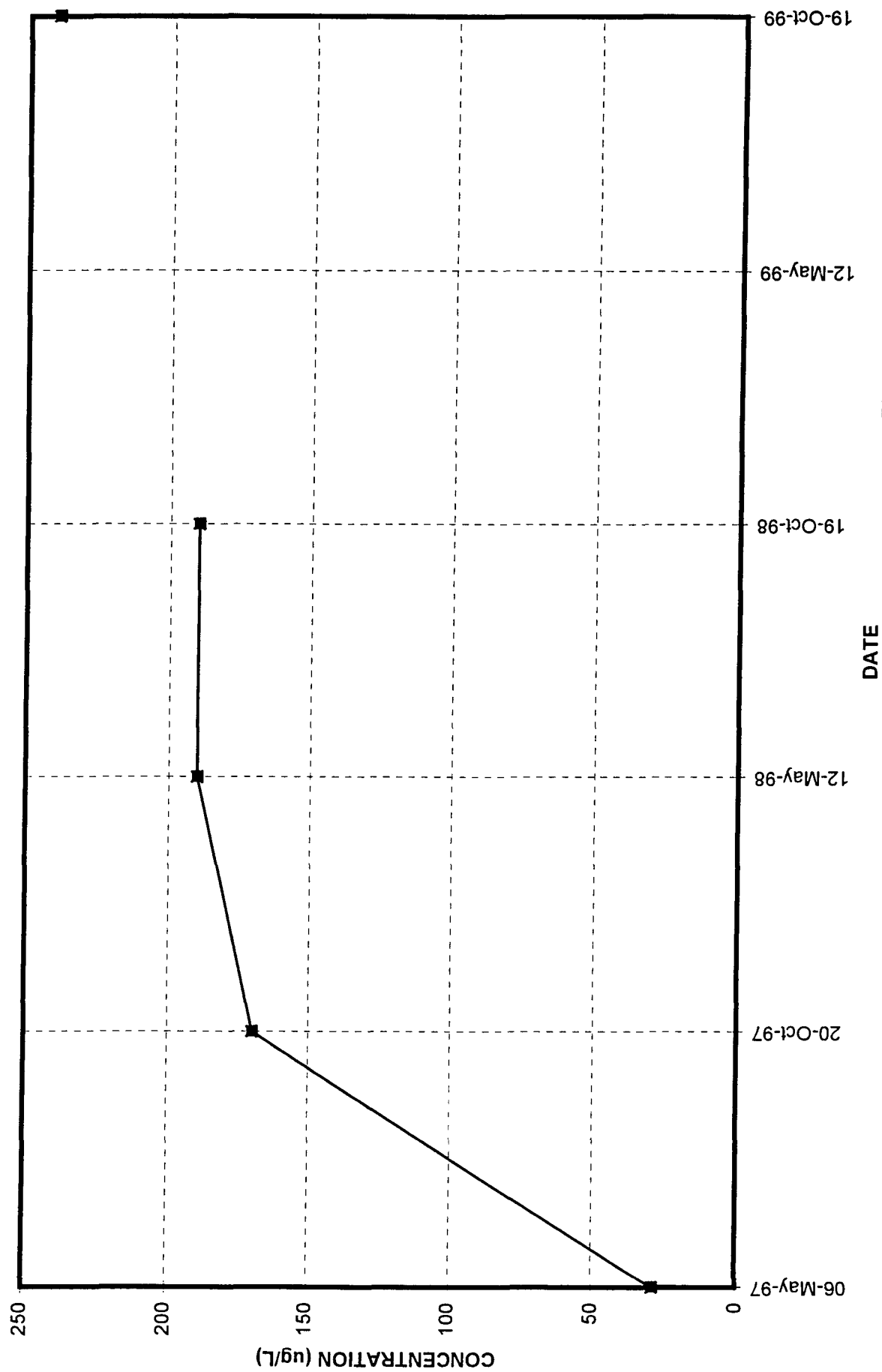


GRAPH 8

MONITOR WELL ACW-04



MONITOR WELL ACW-04

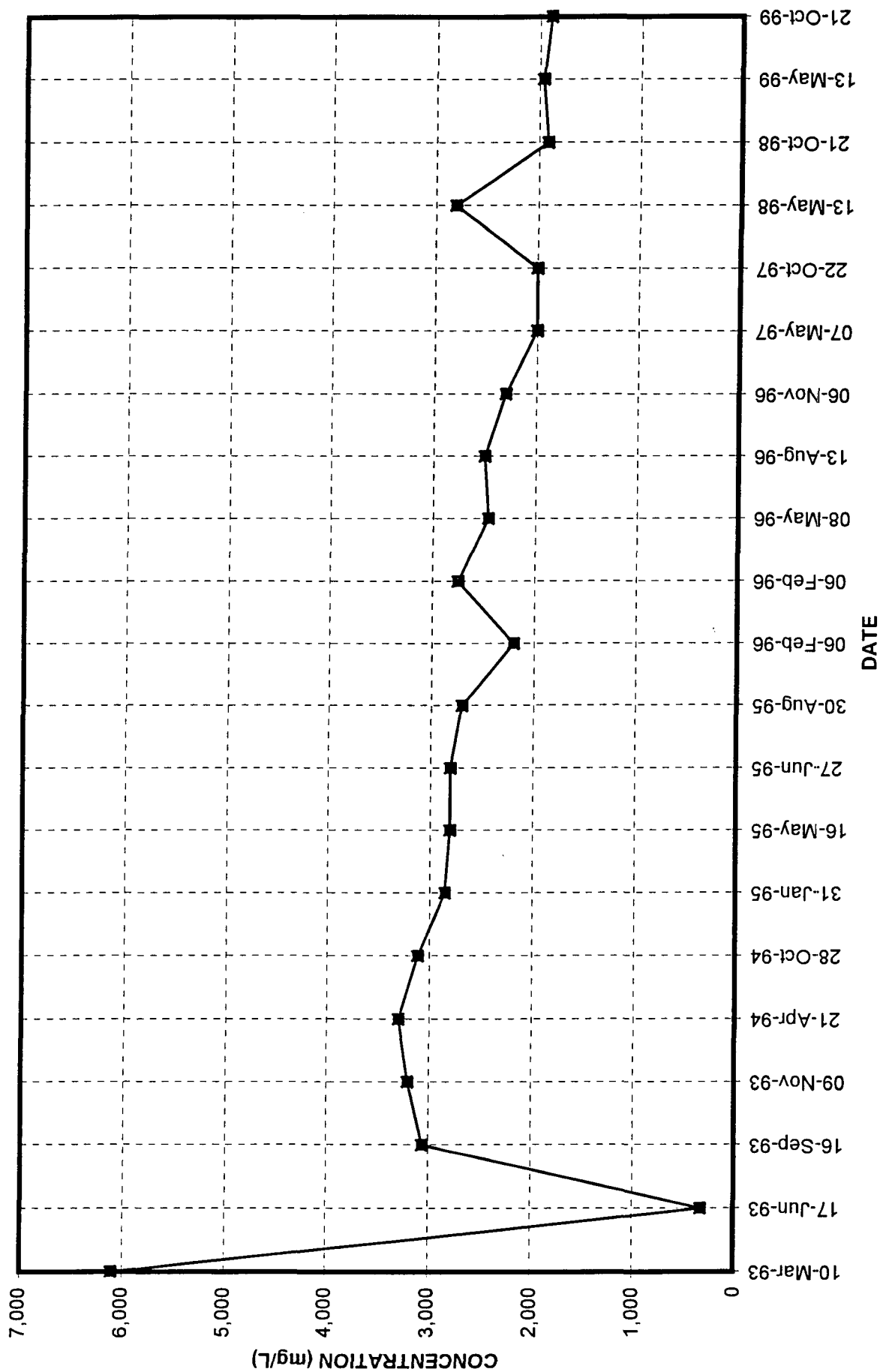


DATE

—■— BENZENE

GRAPH 9

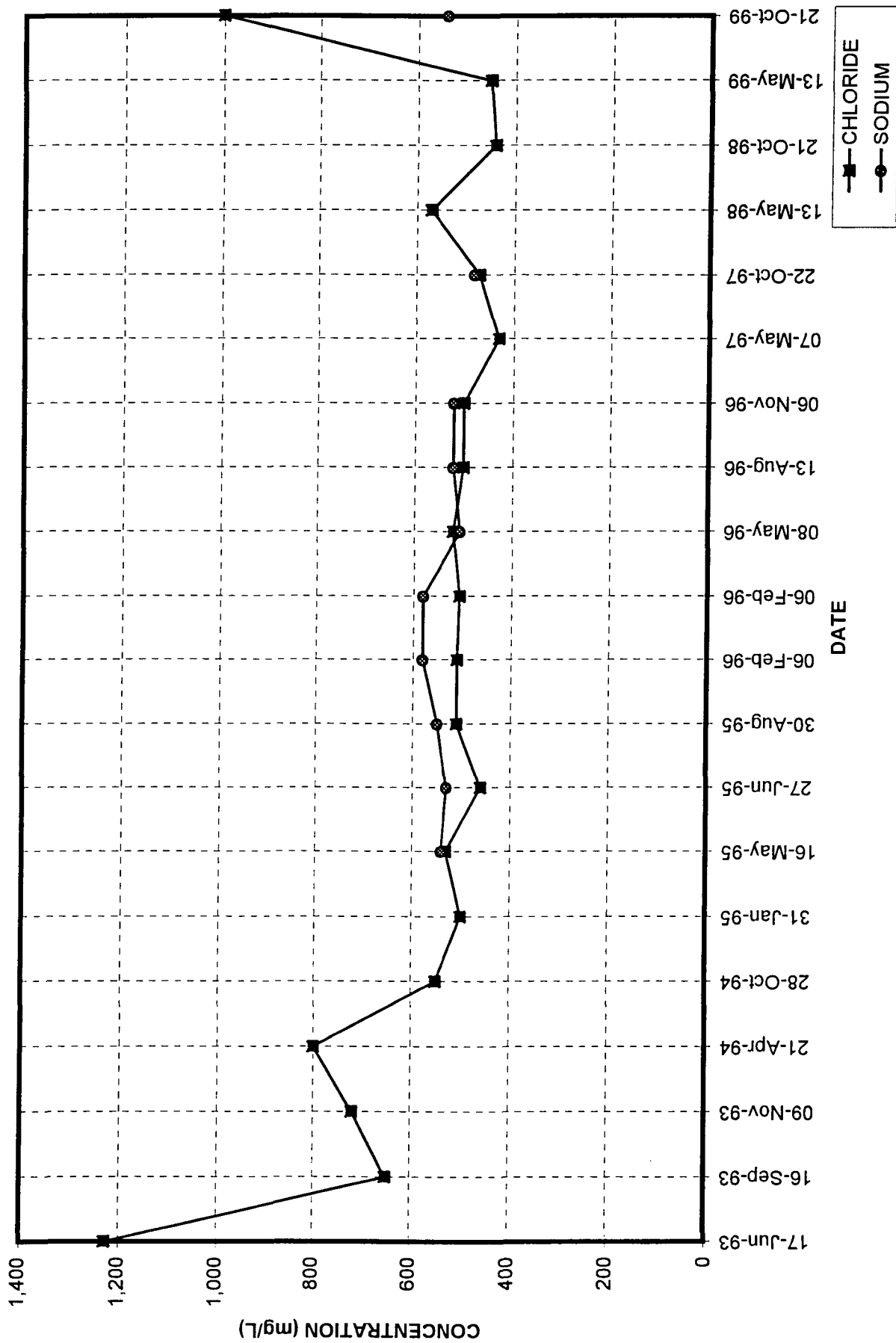
MONITOR WELL ACW-05



—■— TOTAL DISSOLVED SOLIDS

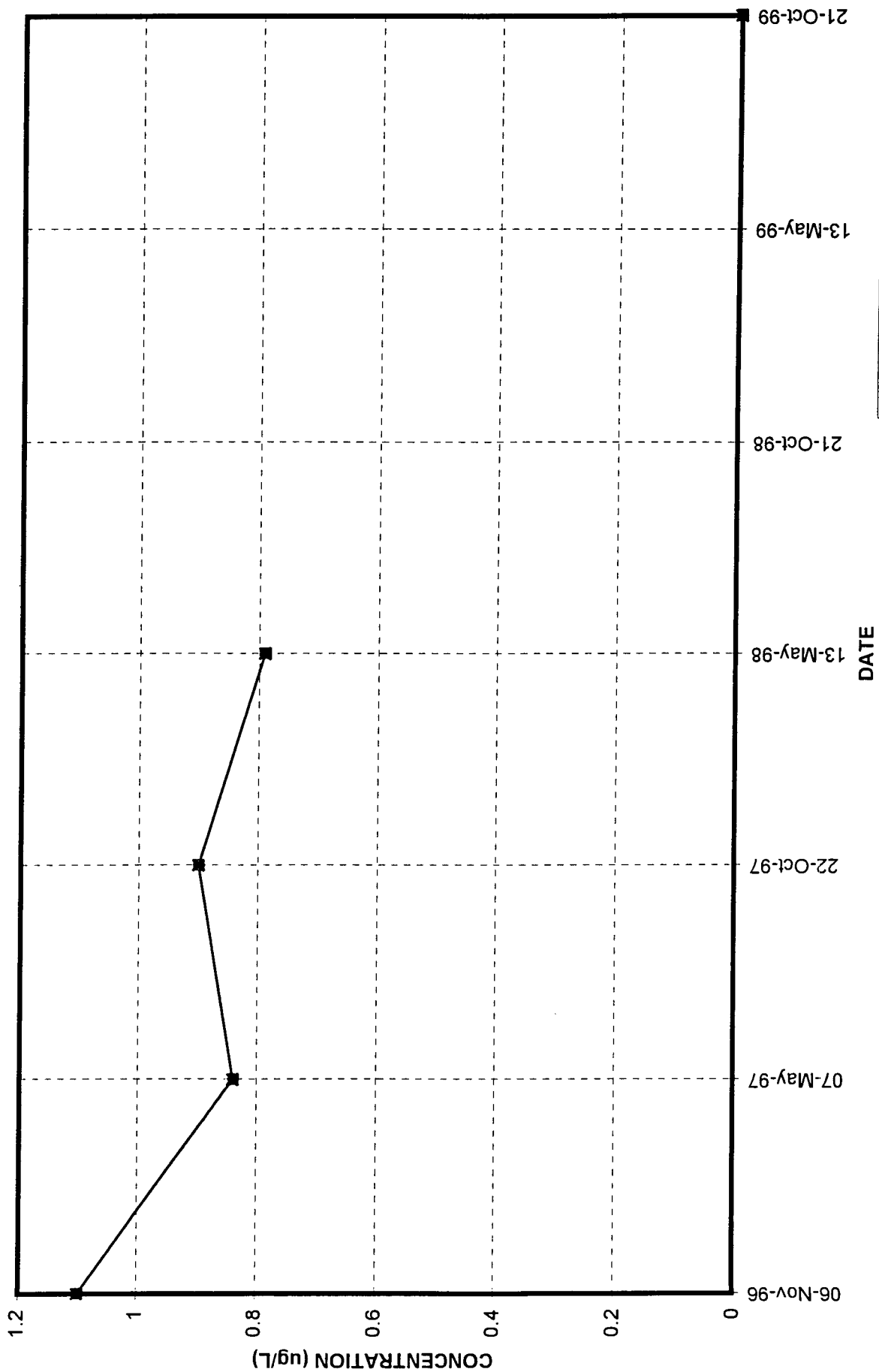
GRAPH 10

MONITOR WELL ACW-05



GRAPH 11

MONITOR WELL ACW-05

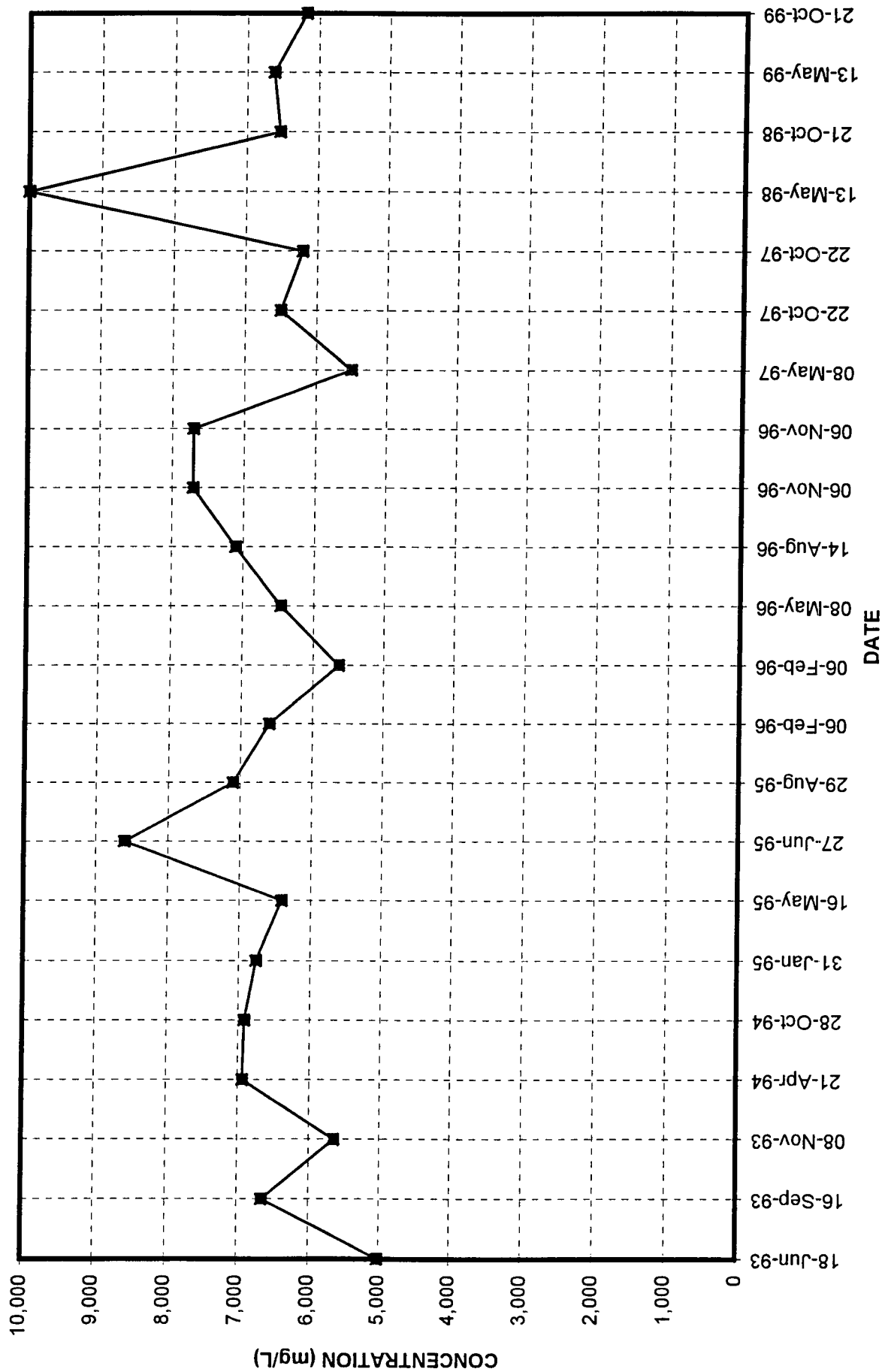


—■— BENZENE

DATE

GRAPH 12

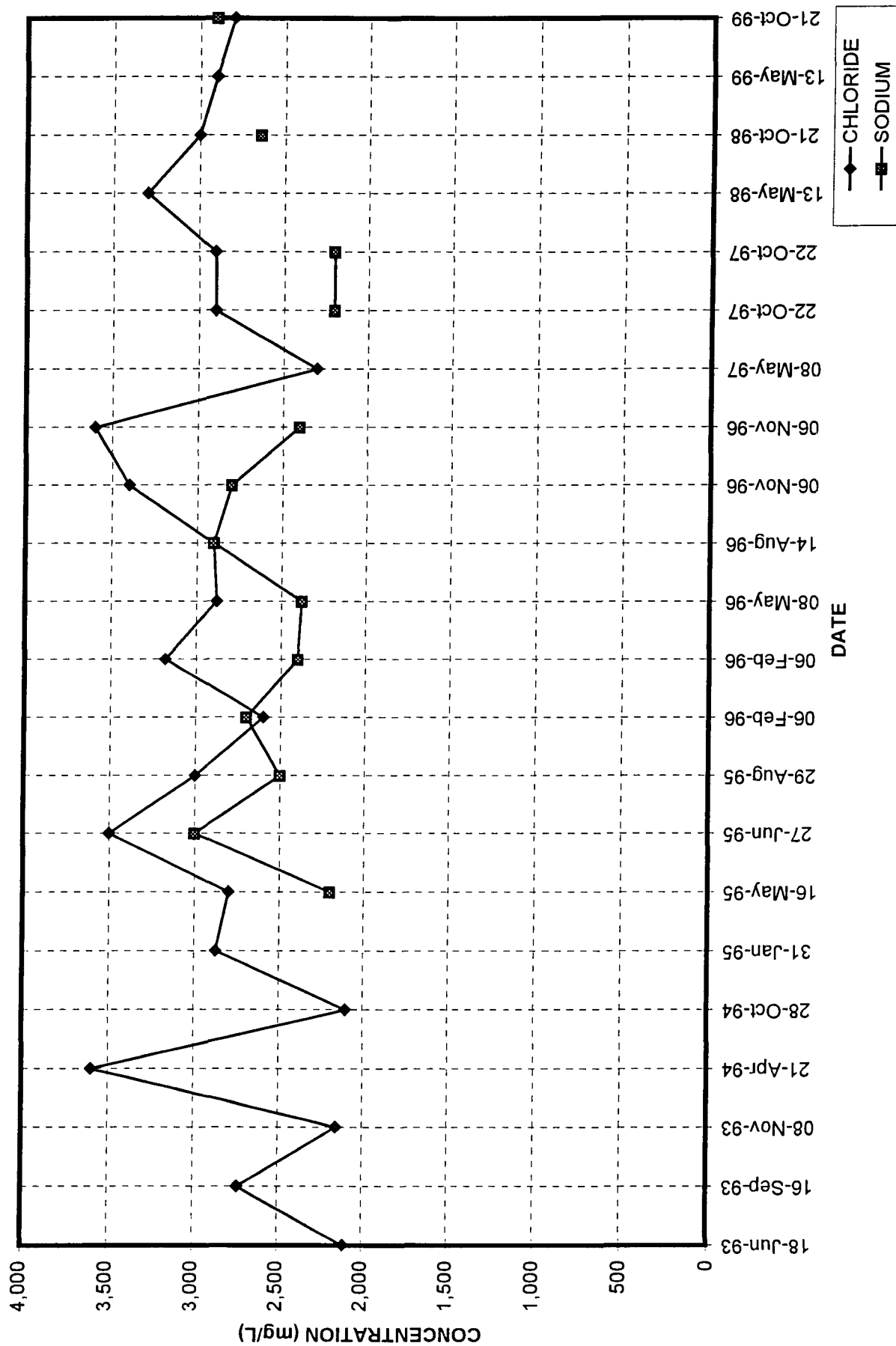
MONITOR WELL ACW-06



—■— TOTAL DISSOLVED SOLIDS

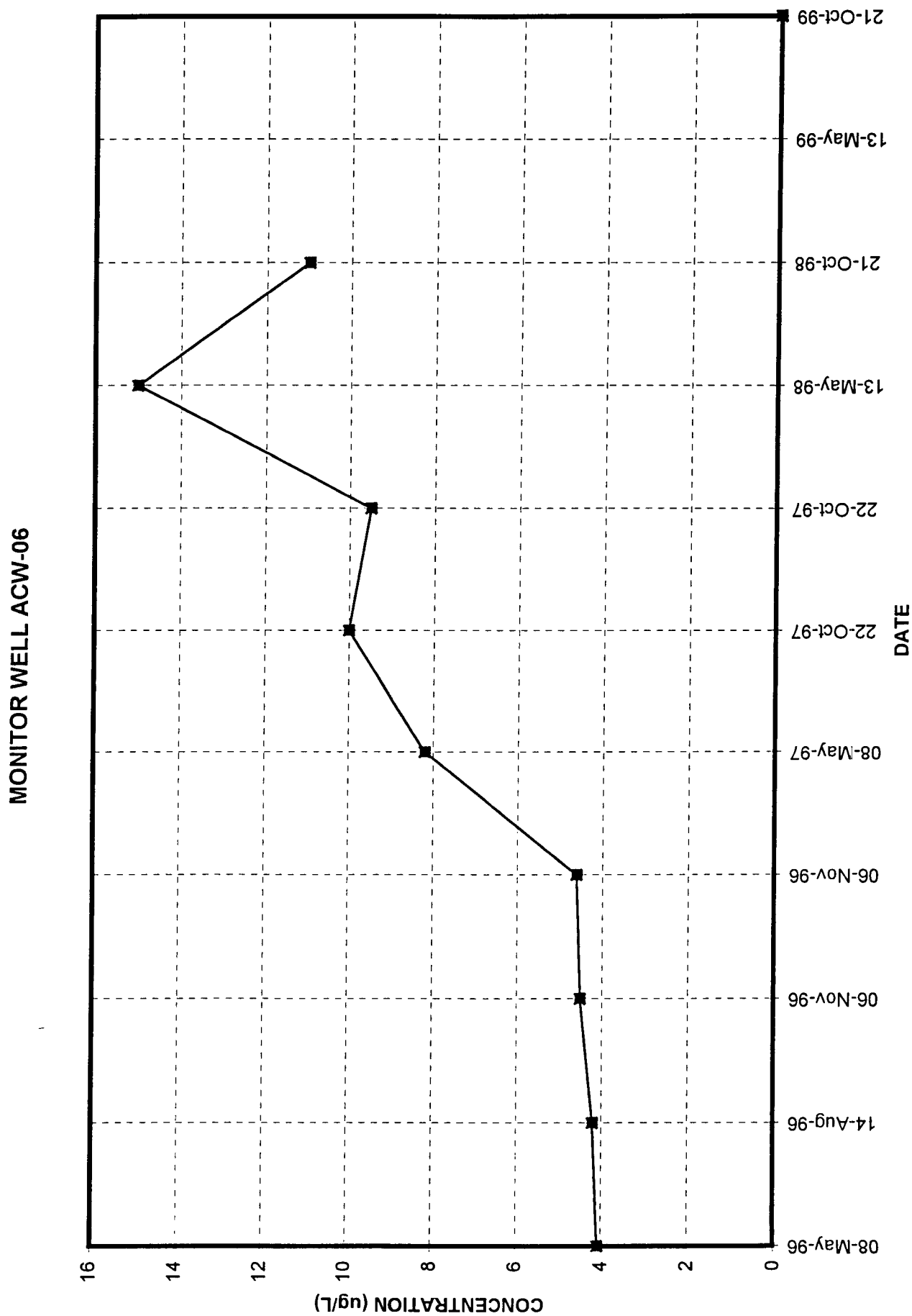
GRAPH 13

MONITOR WELL ACW-06



GRAPH 14

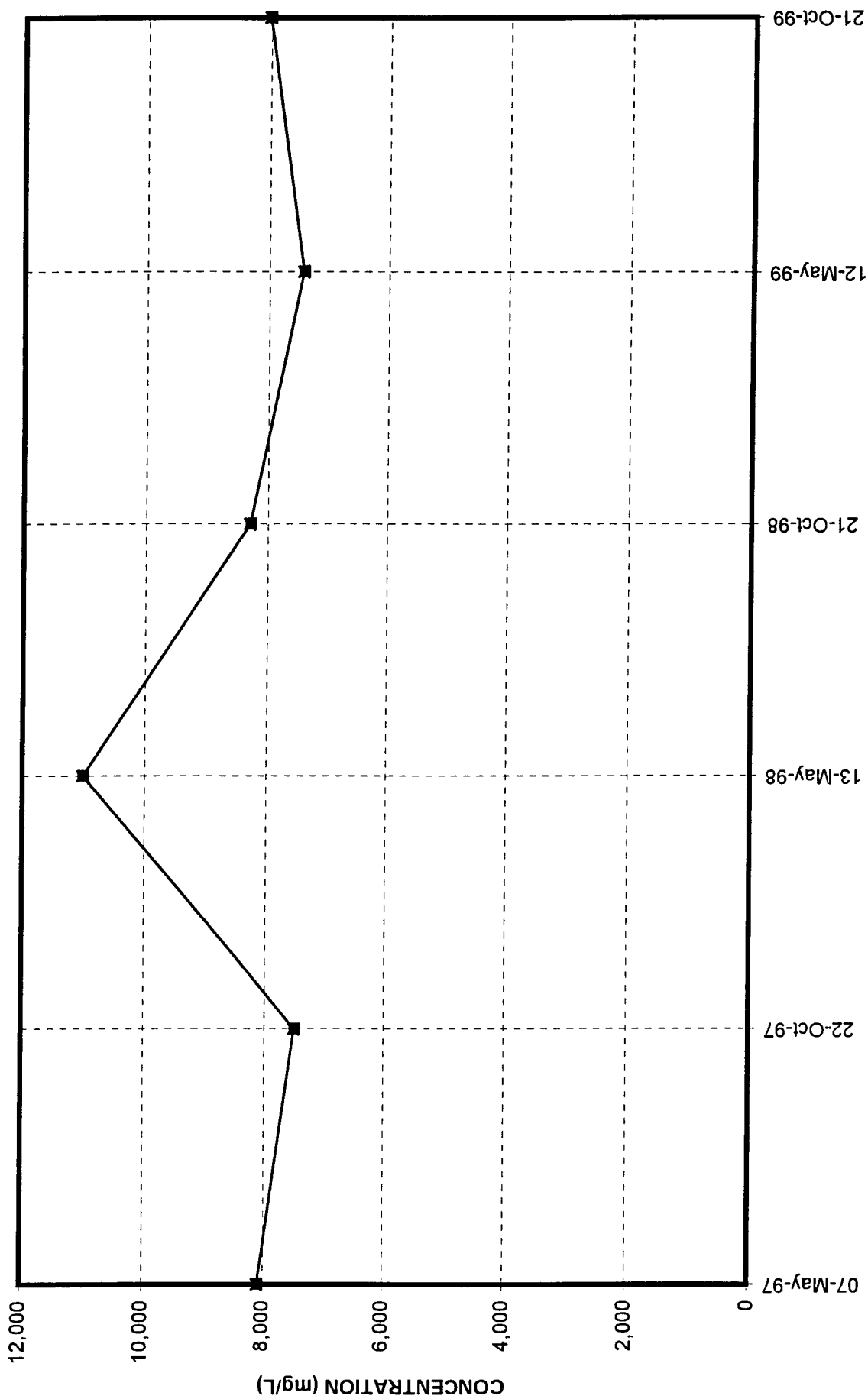
GRAPH 15



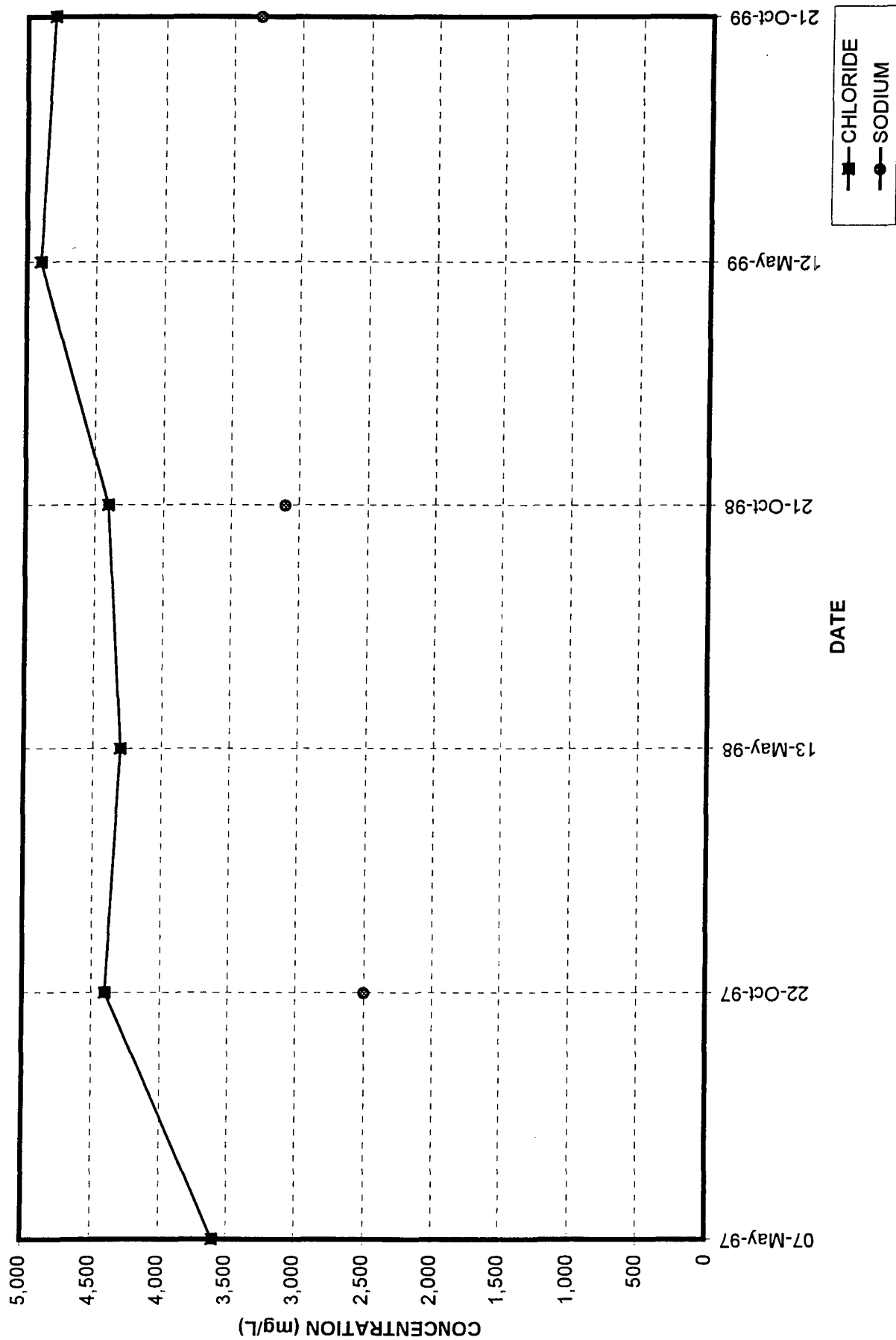
GRAPH 16

---■--- TOTAL DISSOLVED SOLIDS

DATE



MONITOR WELL ACW-07



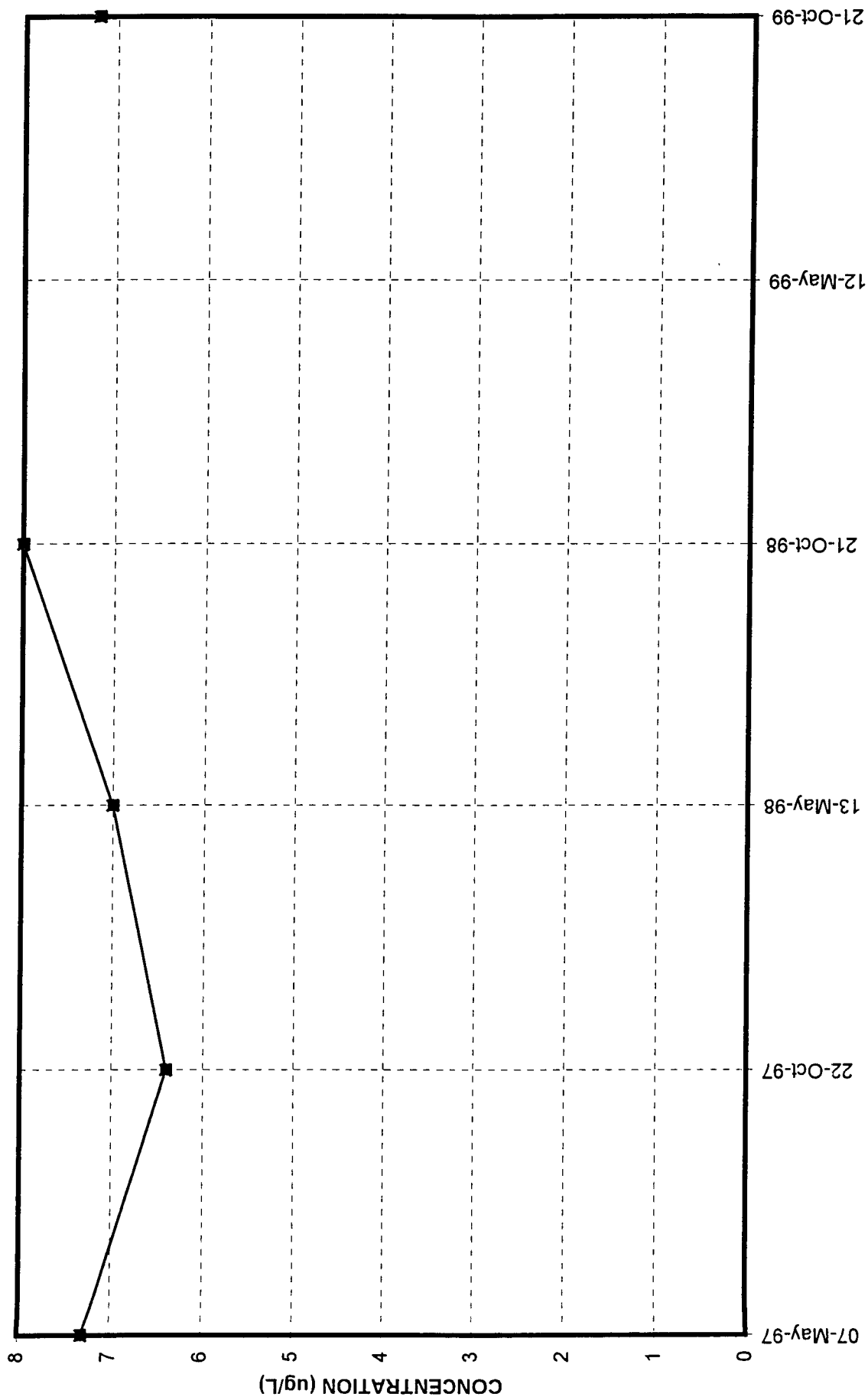
GRAPH 17

GRAPH 18

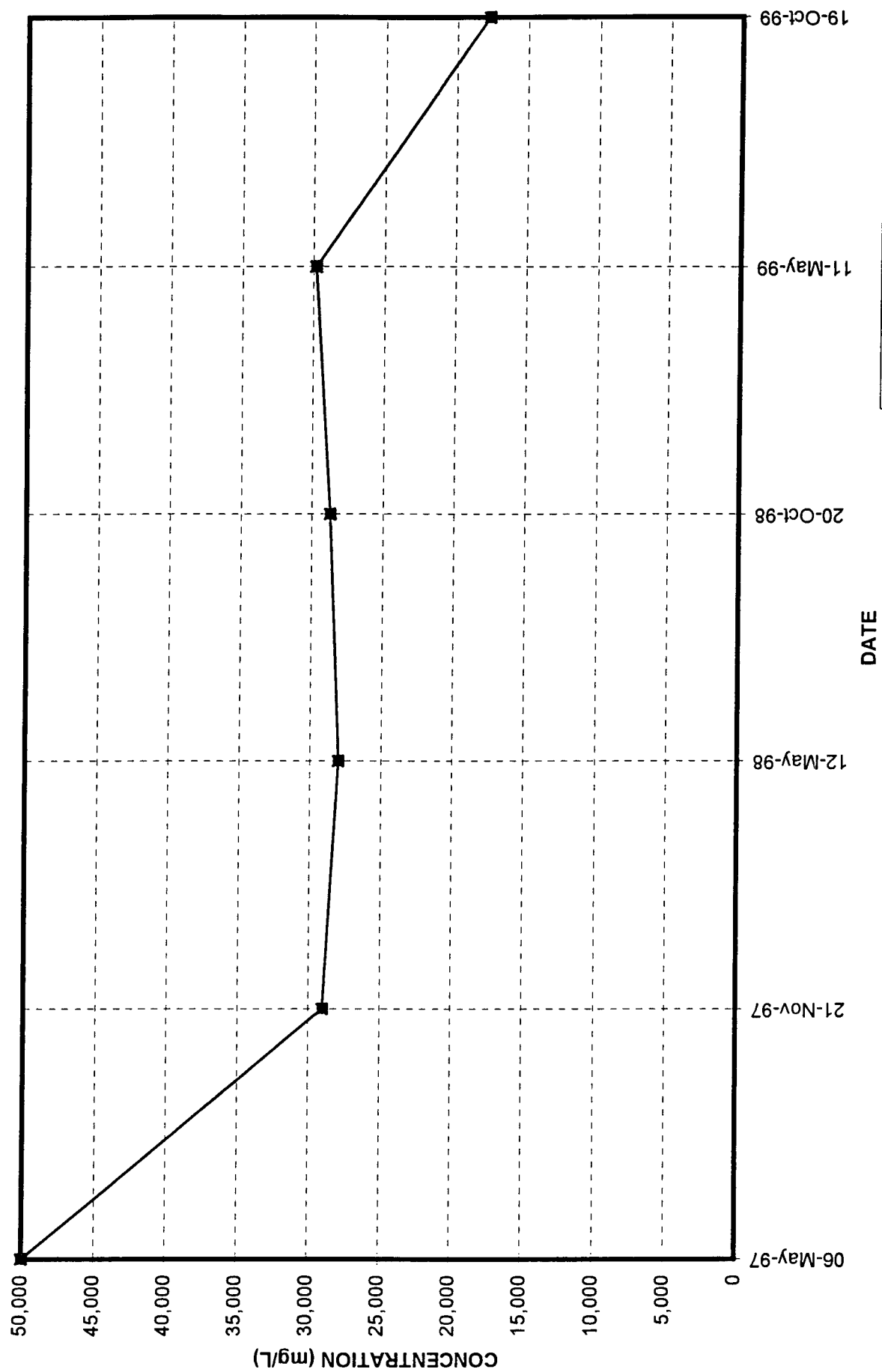
—■— BENZENE

DATE

MONITOR WELL ACW-07

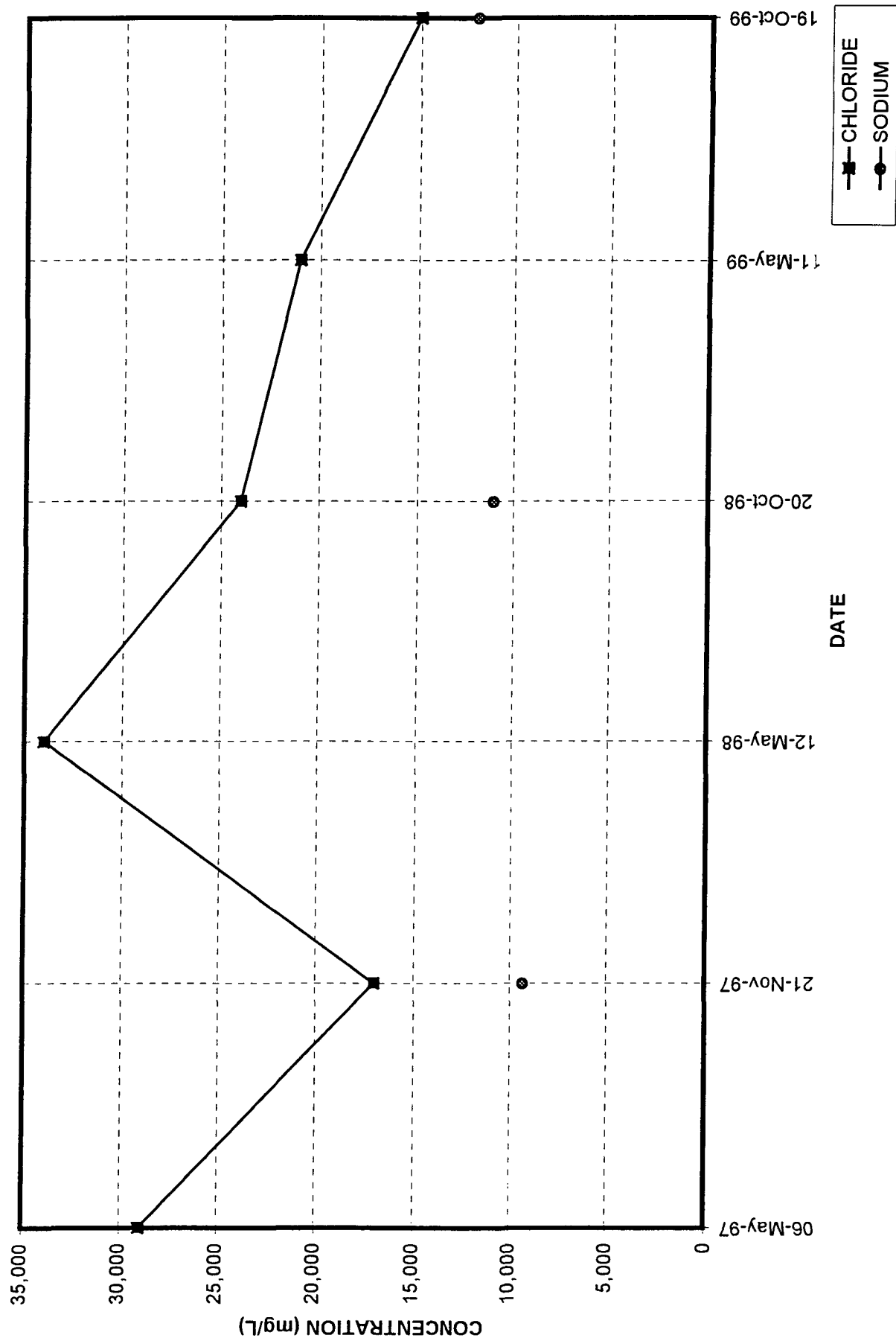


MONITOR WELL ACW-08



GRAPH 19

MONITOR WELL ACW-08

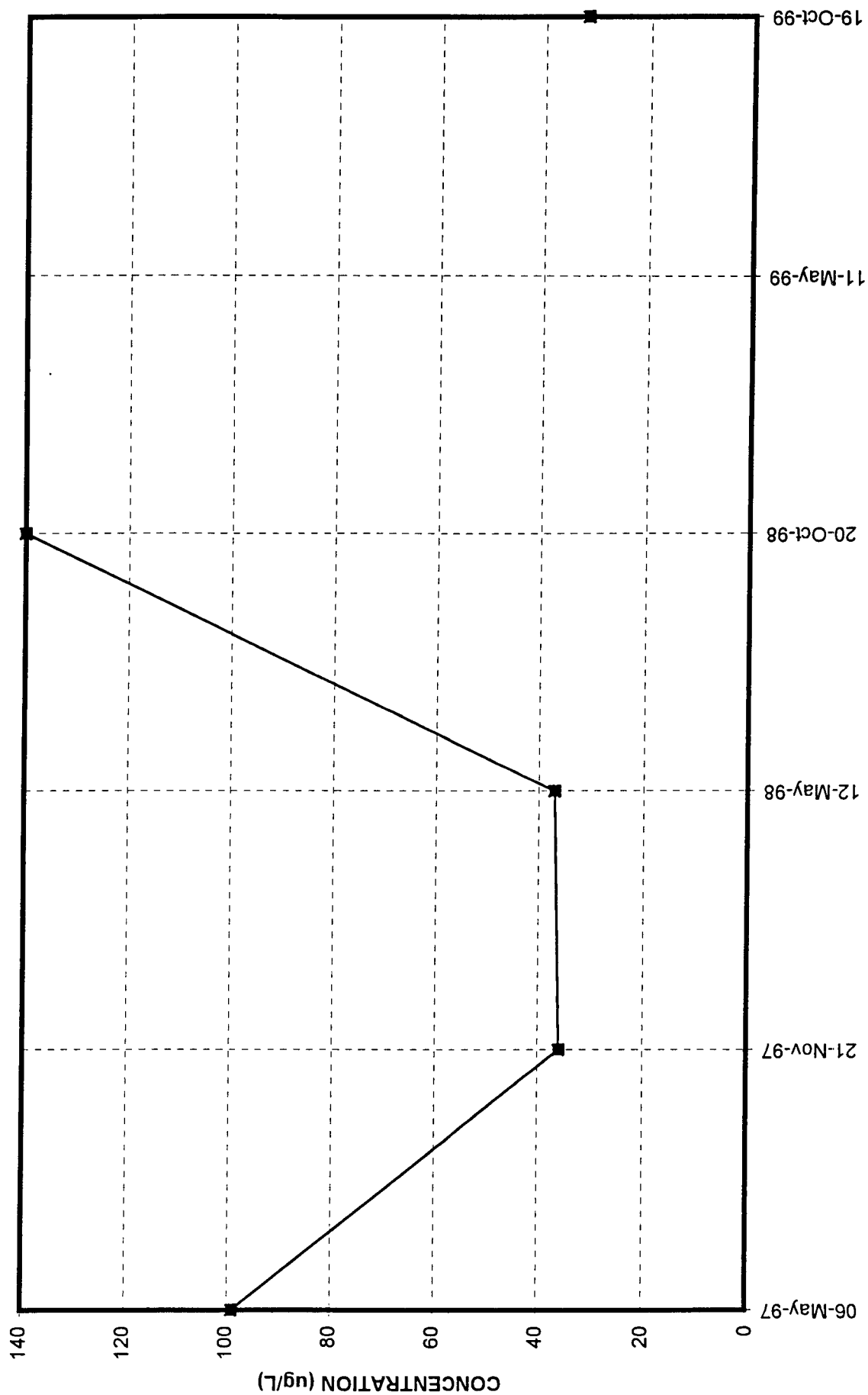


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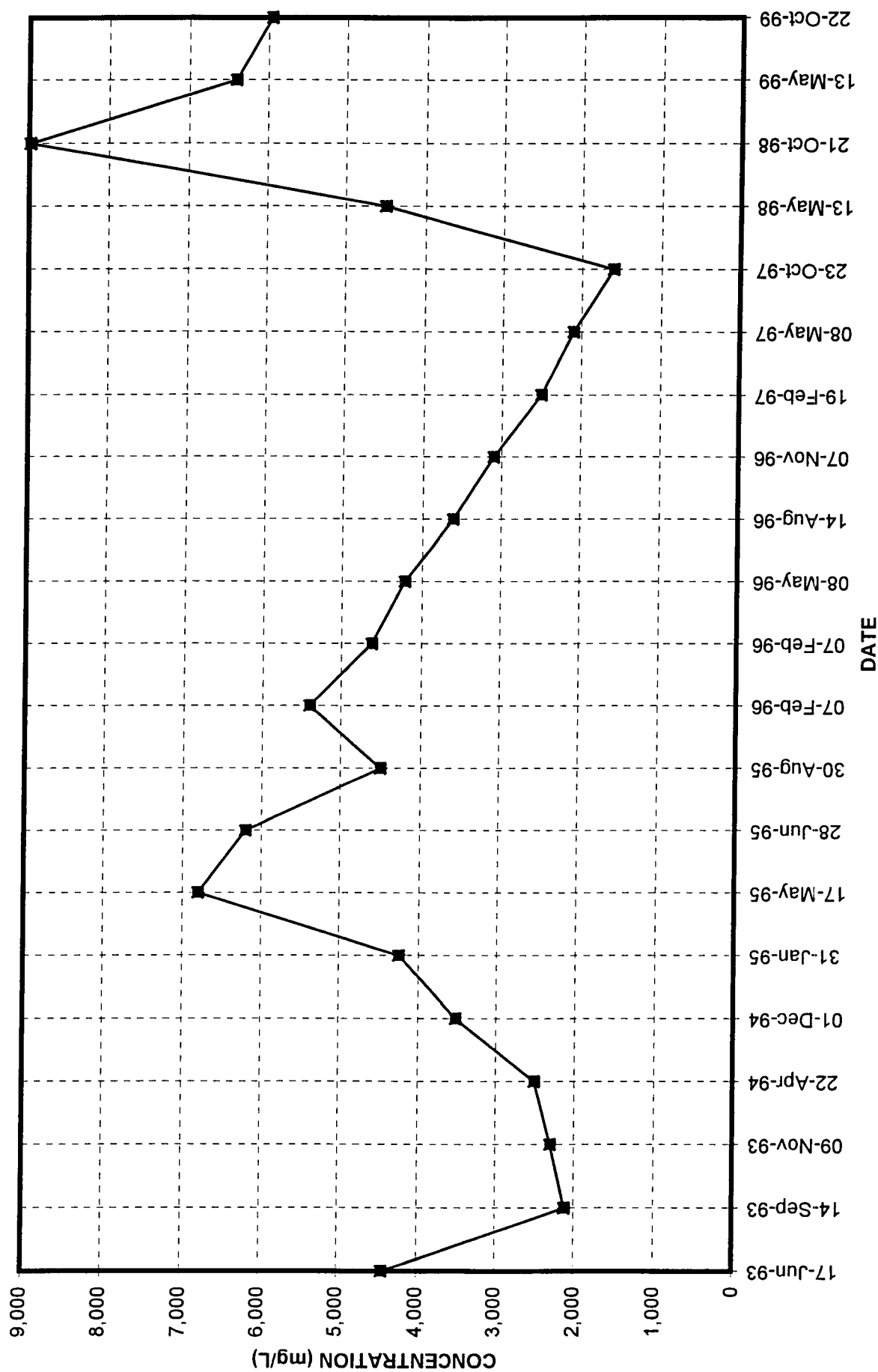
GRAPH 21

■ BENZENE

DATE

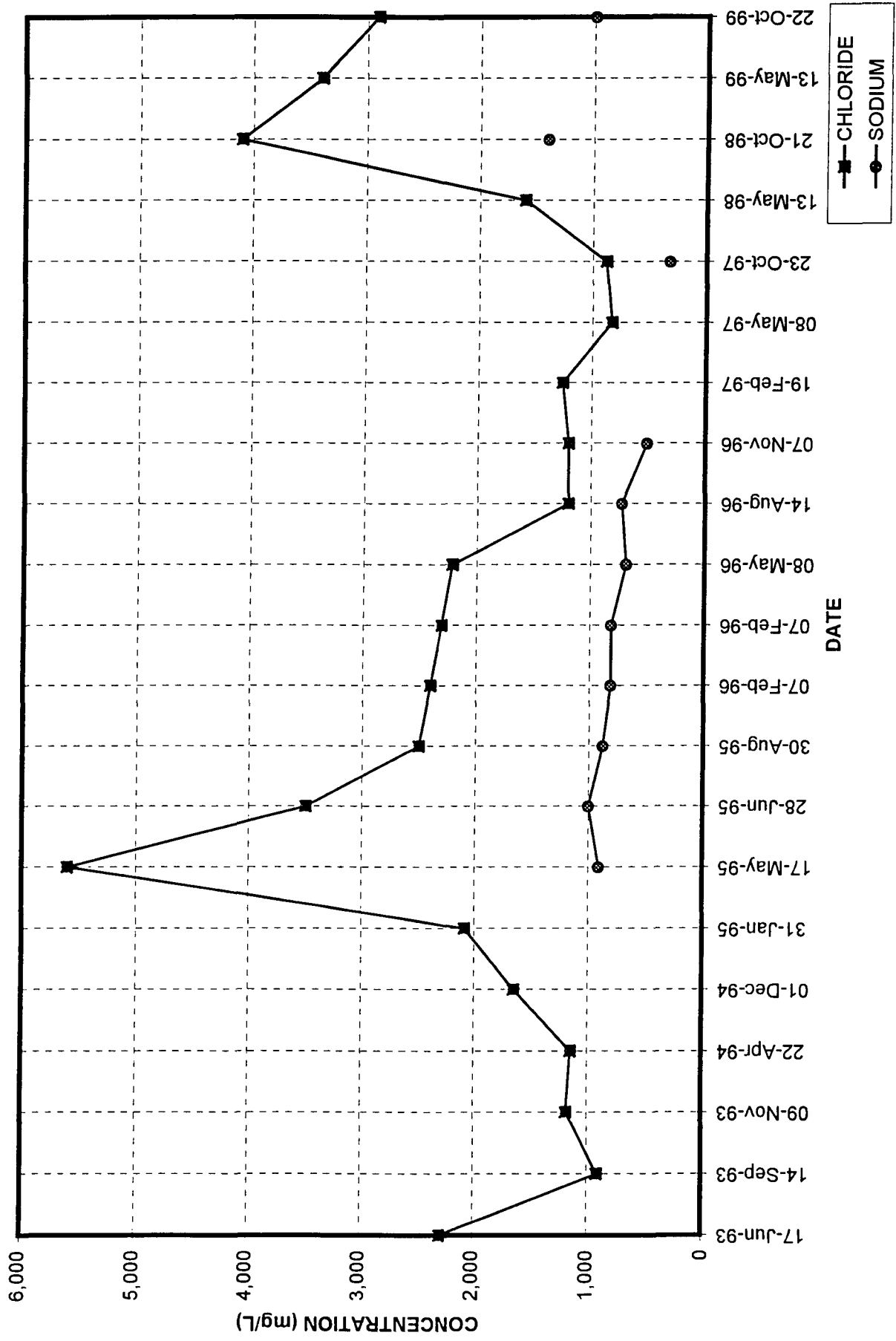


MONITOR WELL ACW-09



GRAPH 22

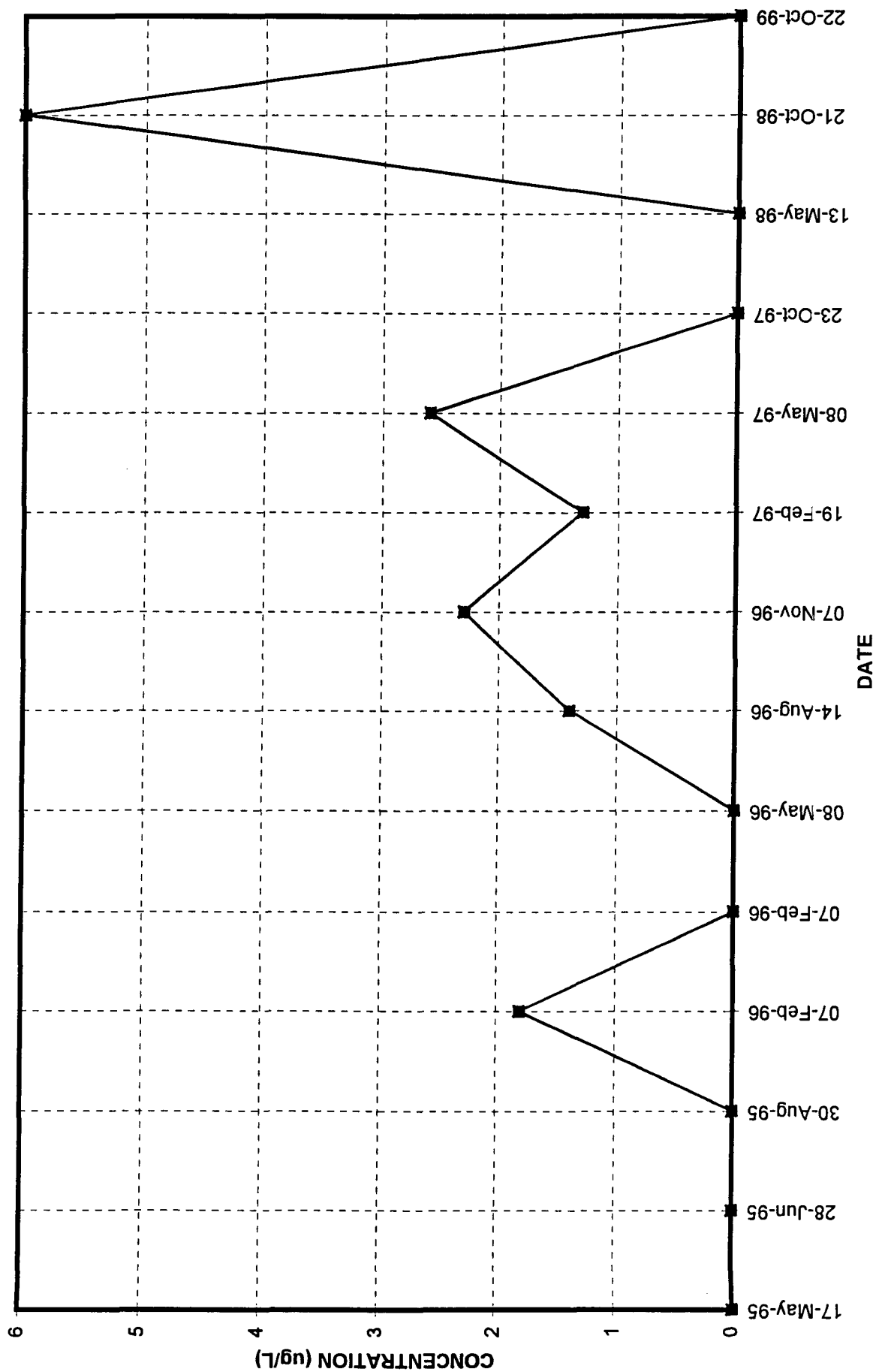
MONITOR WELL ACW-09



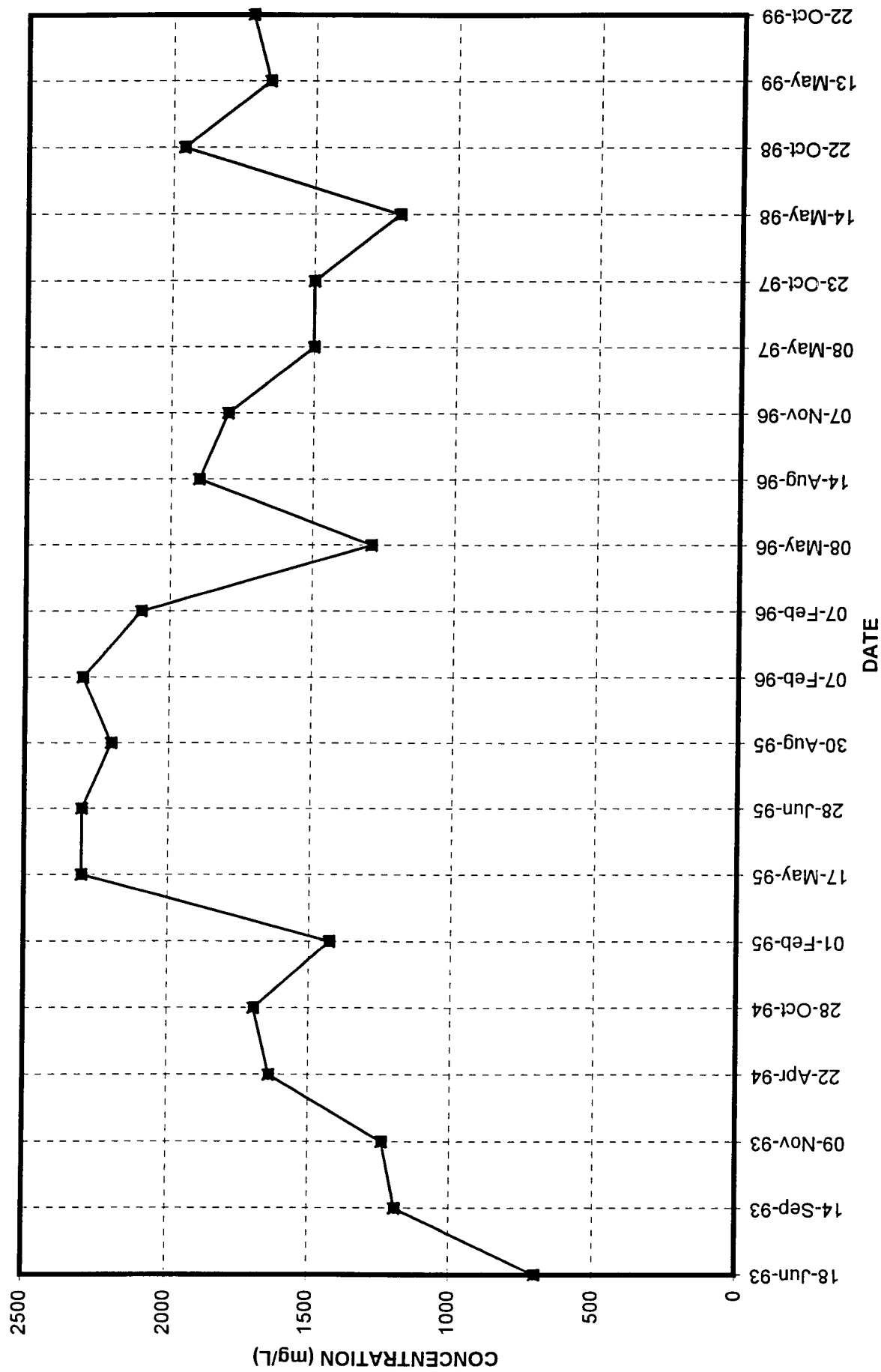
GRAPH 23

GRAPH 24

MONITOR WELL ACW-09



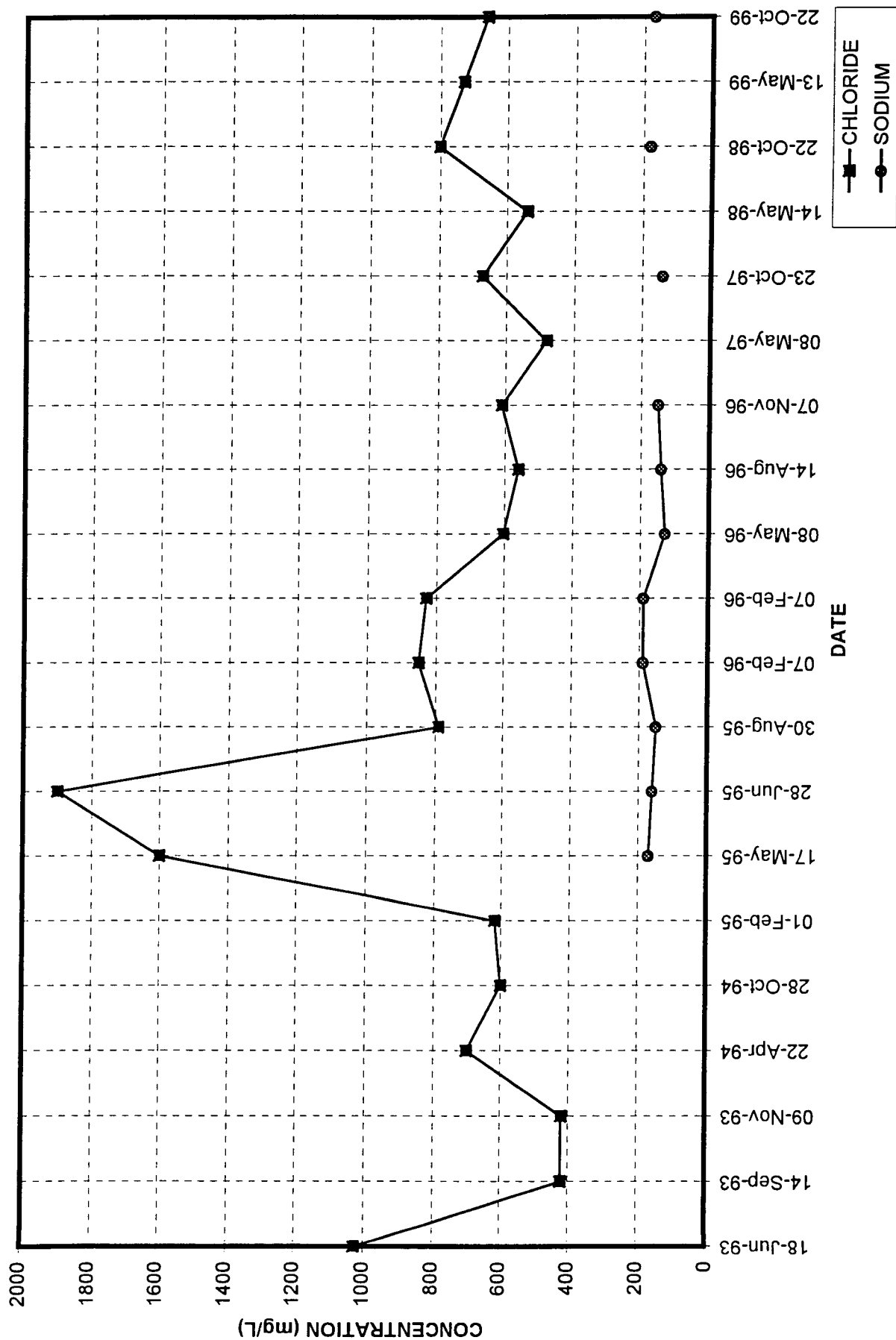
MONITOR WELL ACW-10



—■— TOTAL DISSOLVED SOLIDS

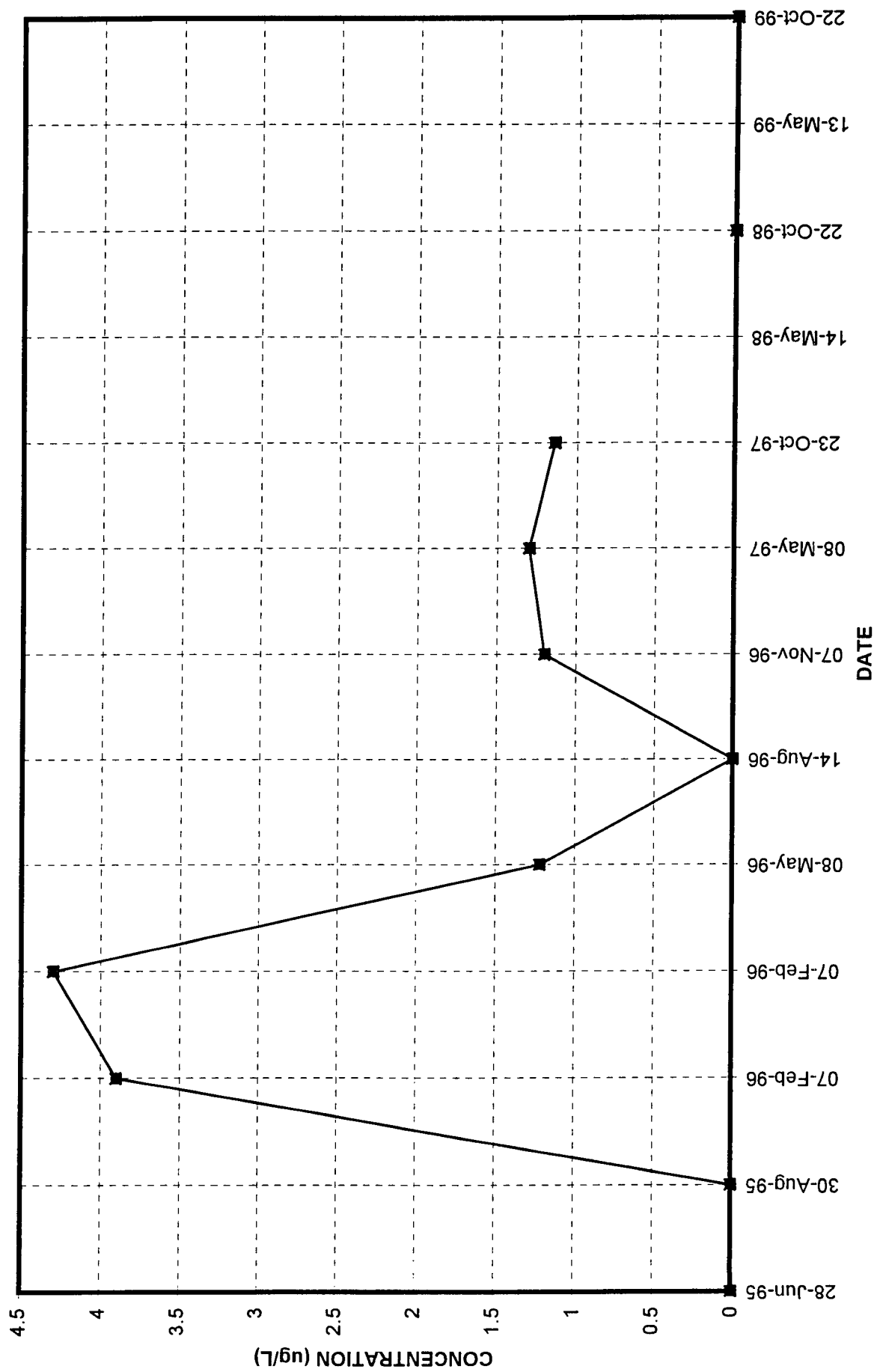
GRAPH 25

MONITOR WELL ACW-10



GRAPH 26

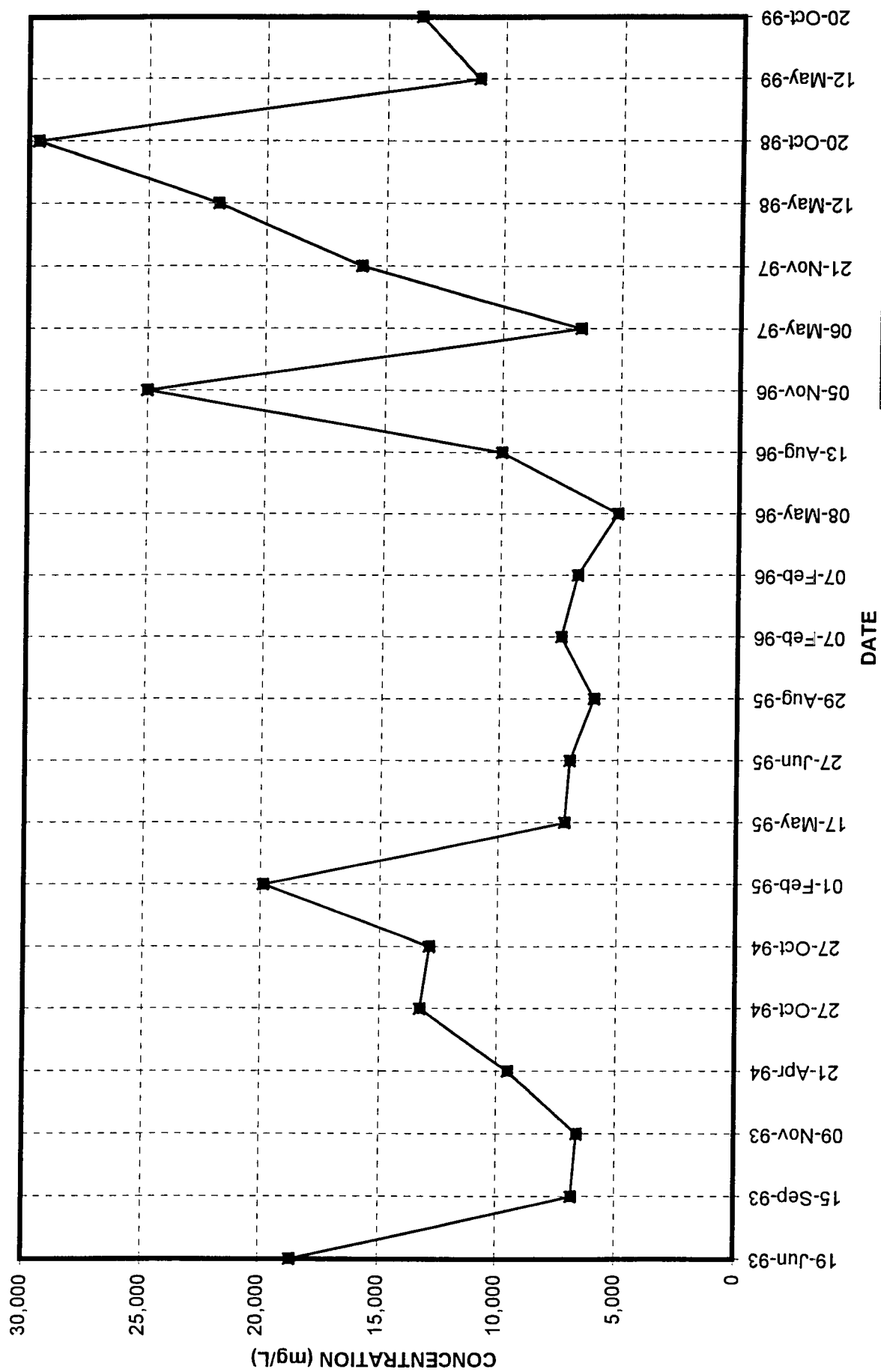
MONITOR WELL ACW-10



—■— BENZENE

GRAPH 27

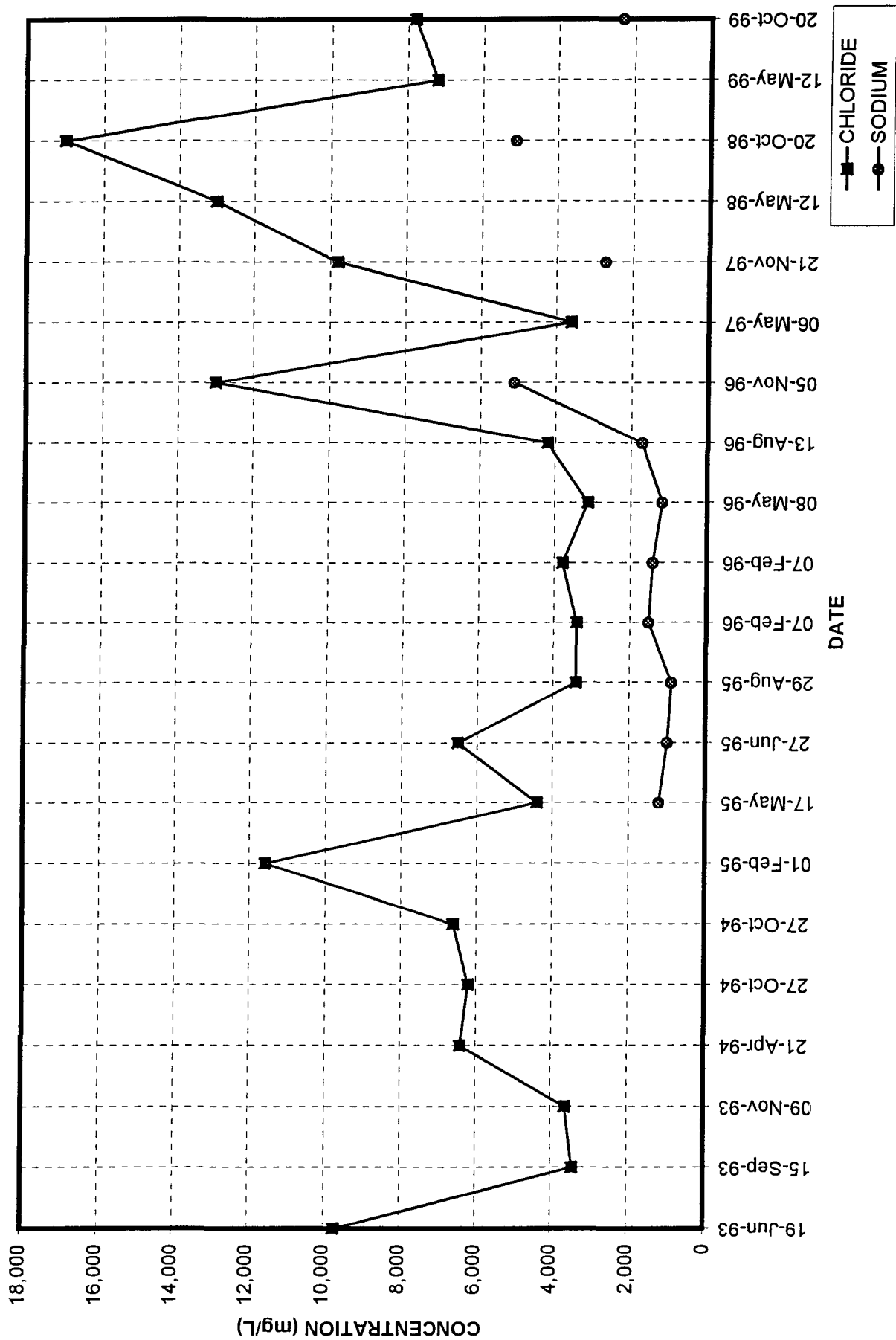
MONITOR WELL ACW-11



—■— TOTAL DISSOLVED SOLIDS

GRAPH 28

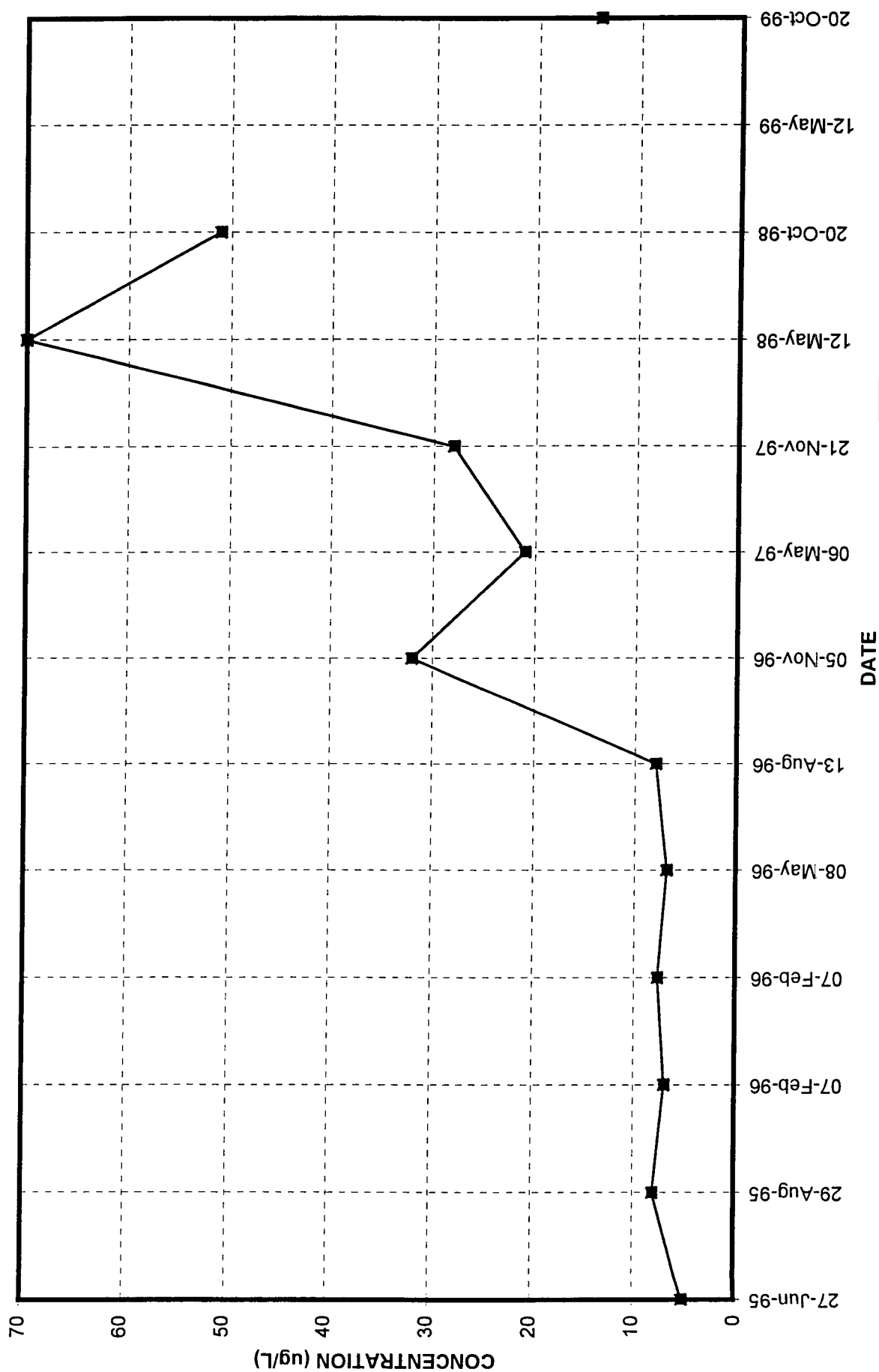
MONITOR WELL ACW-11



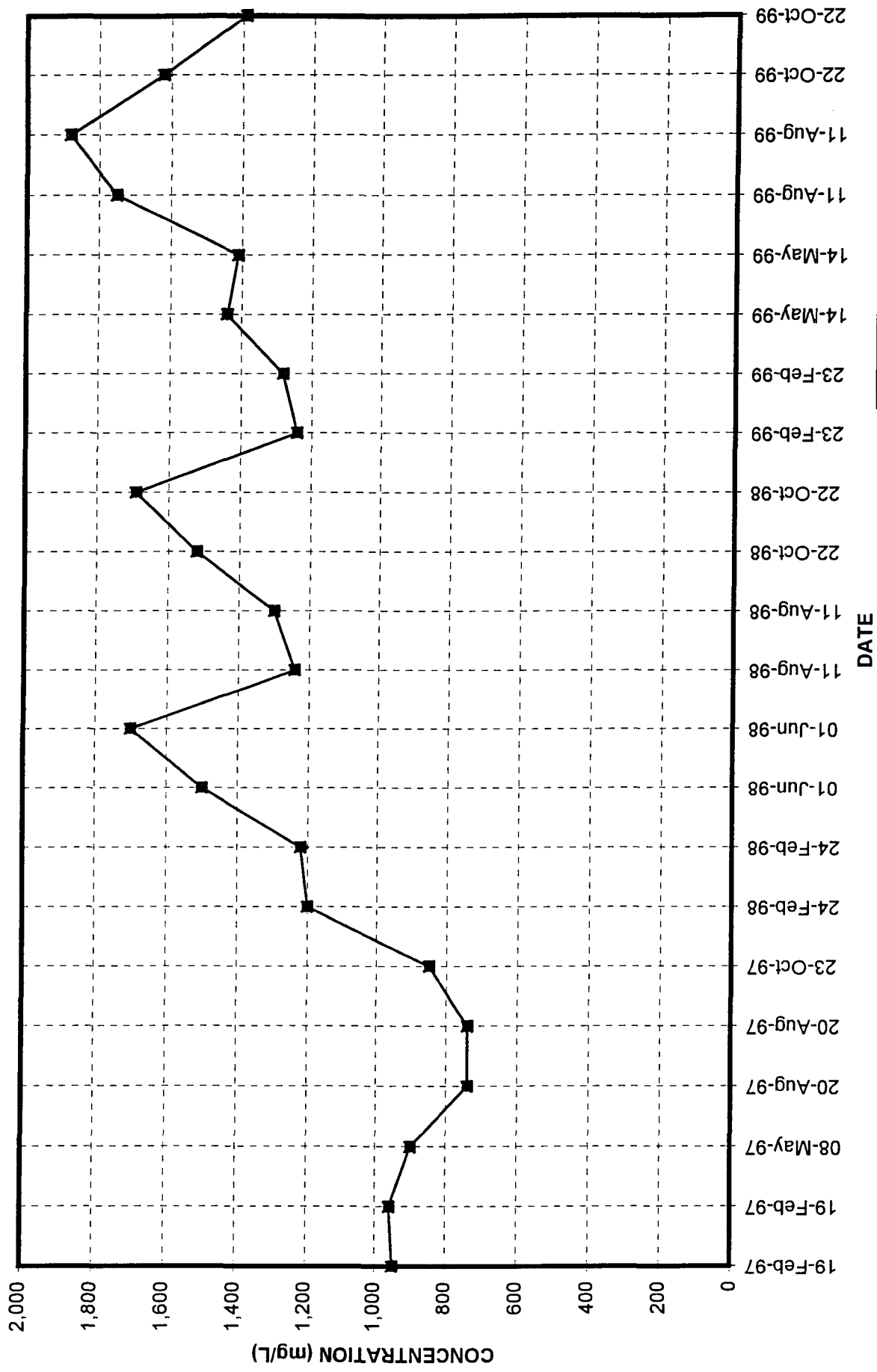
GRAPH 29

GRAPH 30

MONITOR WELL ACW-11

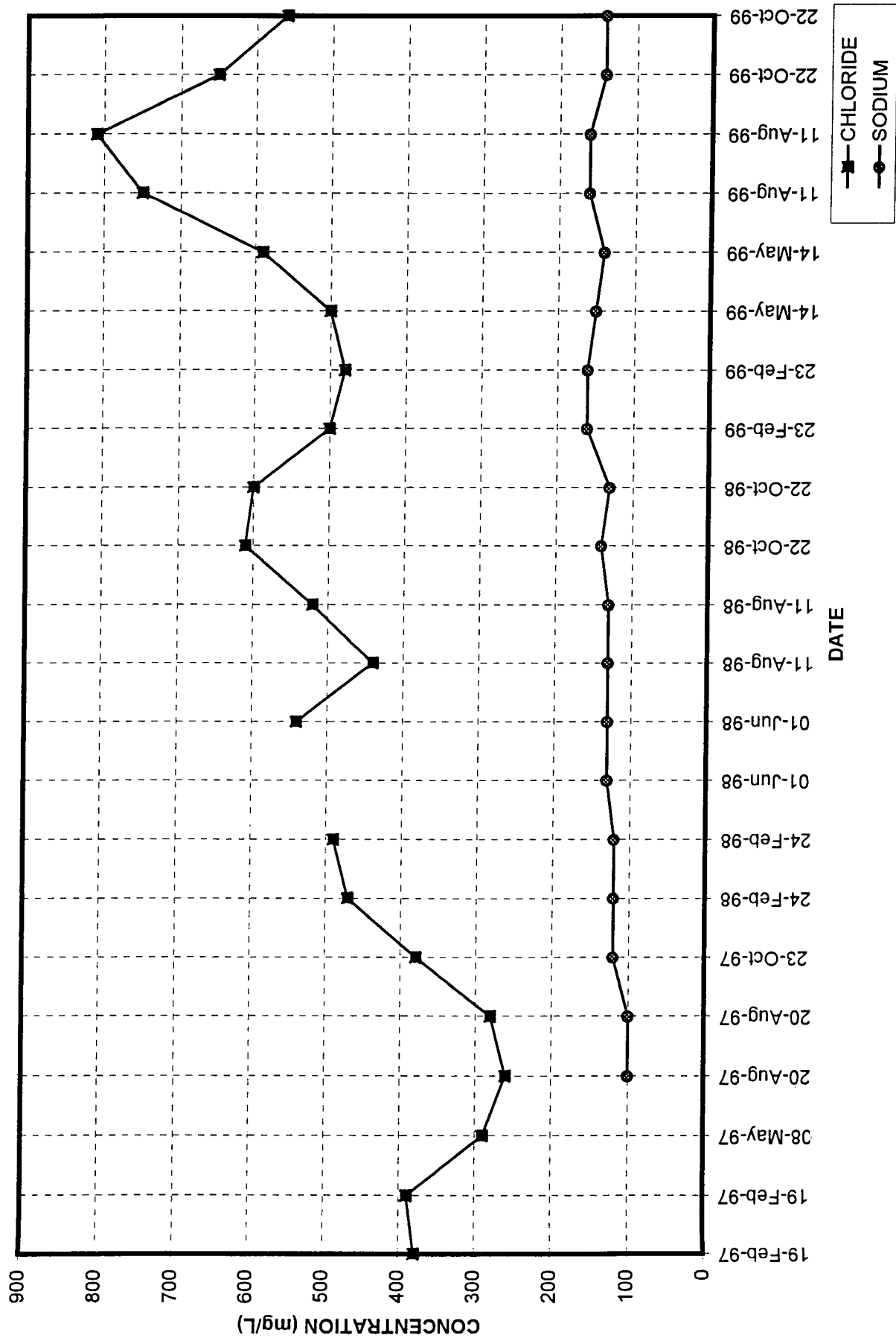


MONITOR WELL ACW-12



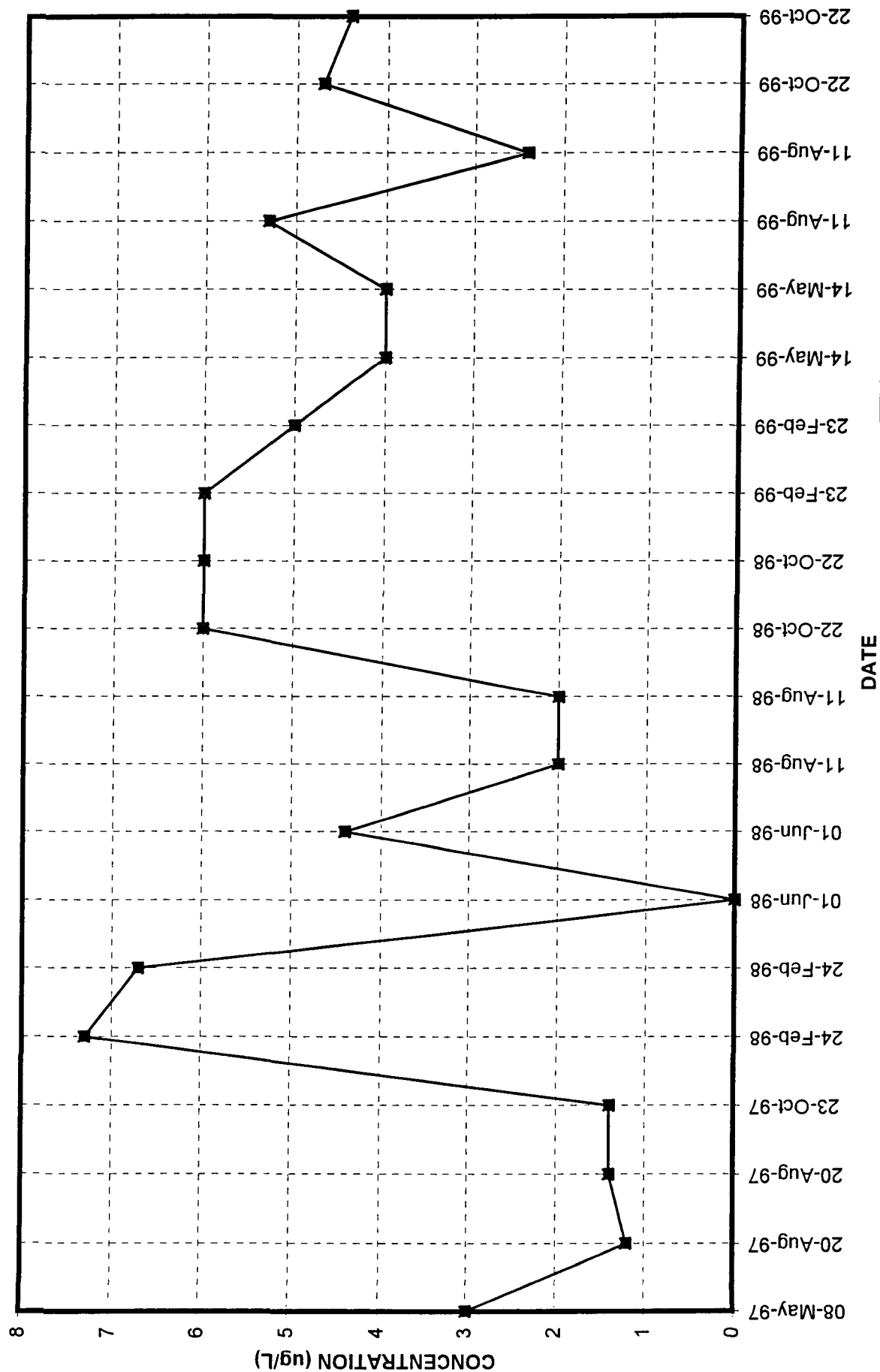
GRAPH 31

MONITOR WELL ACW-12



GRAPH 32

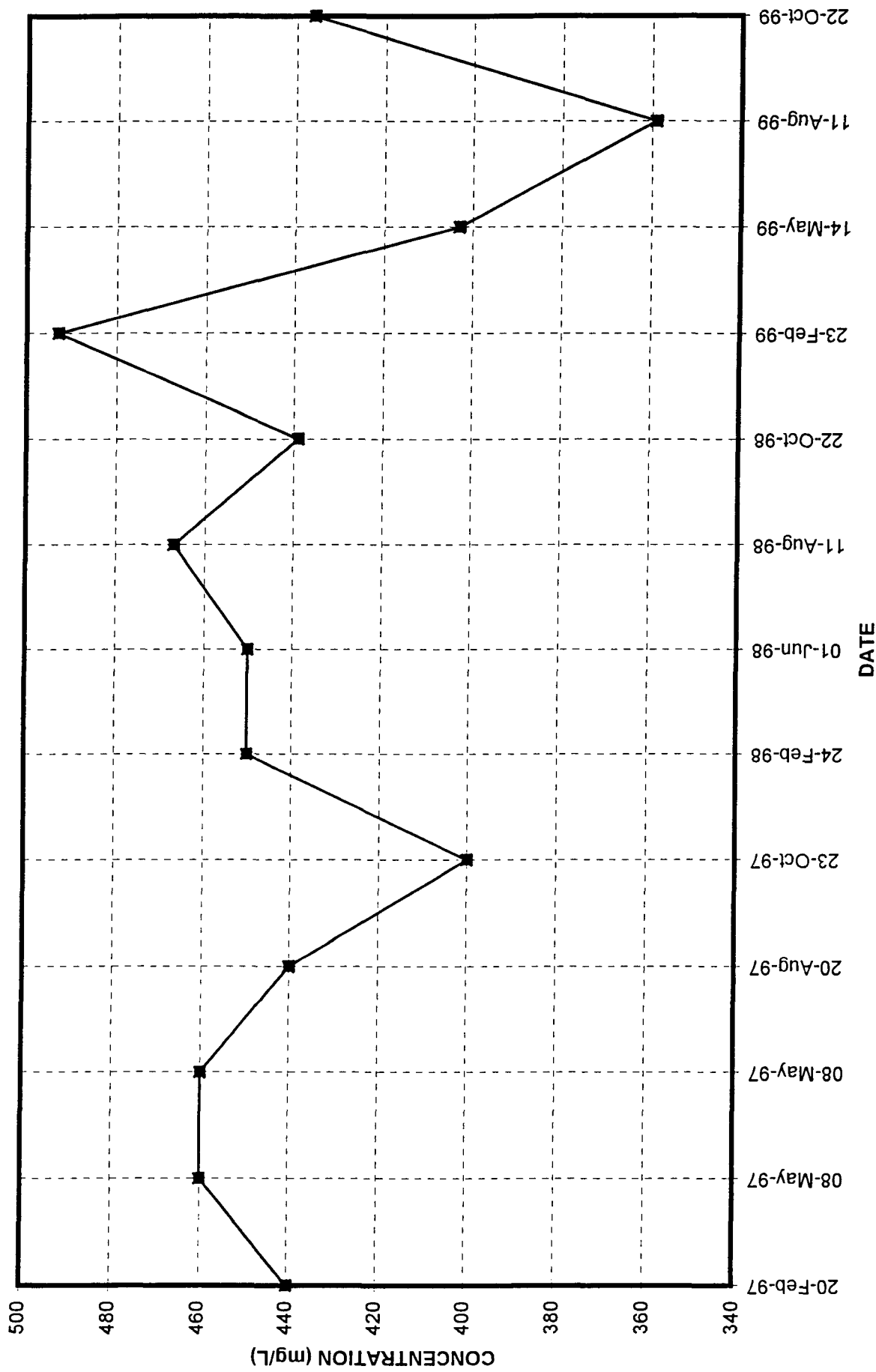
MONITOR WELL ACW-12



—■— BENZENE

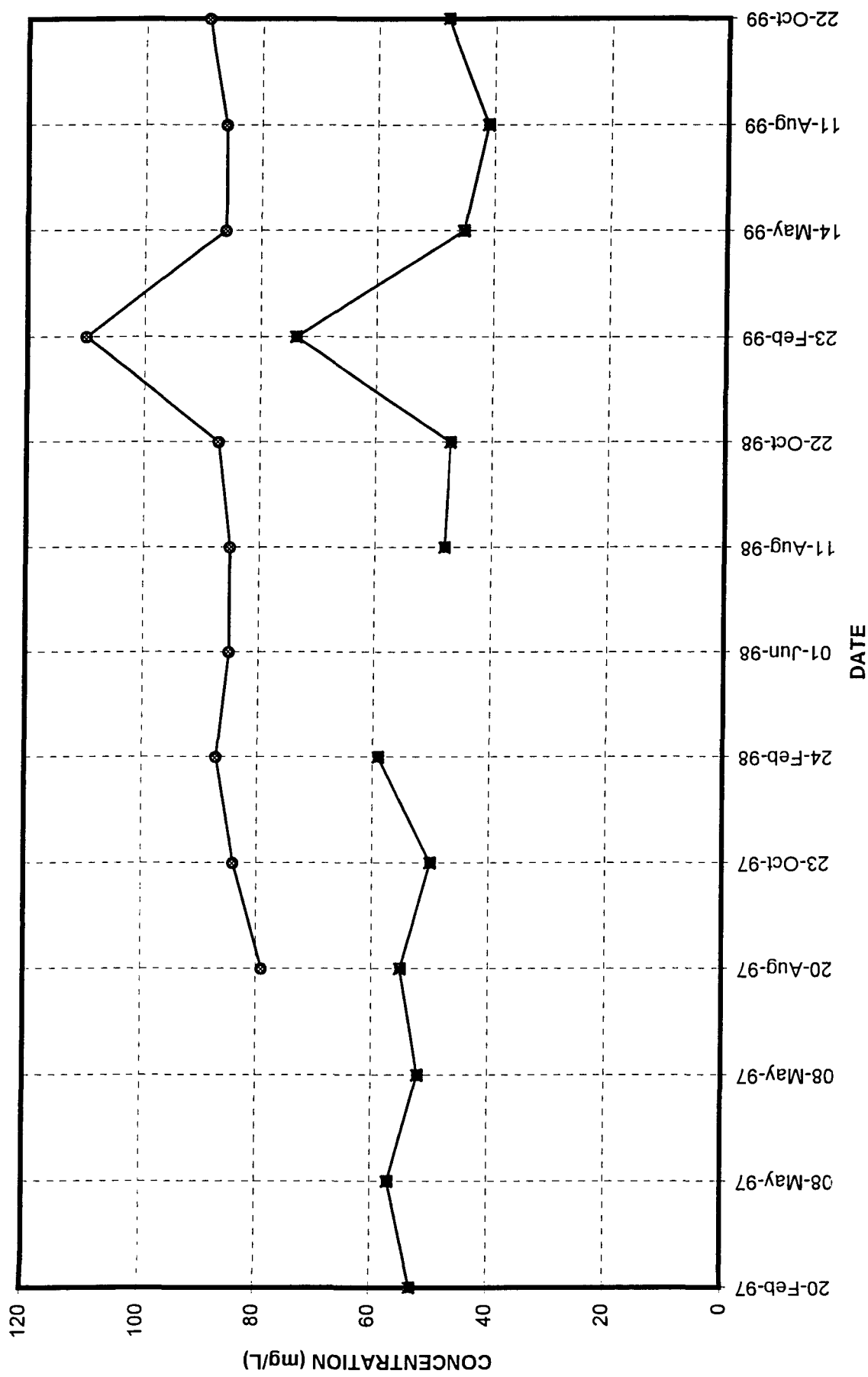
GRAPH 33

MONITOR WELL ACW-13



GRAPH 34

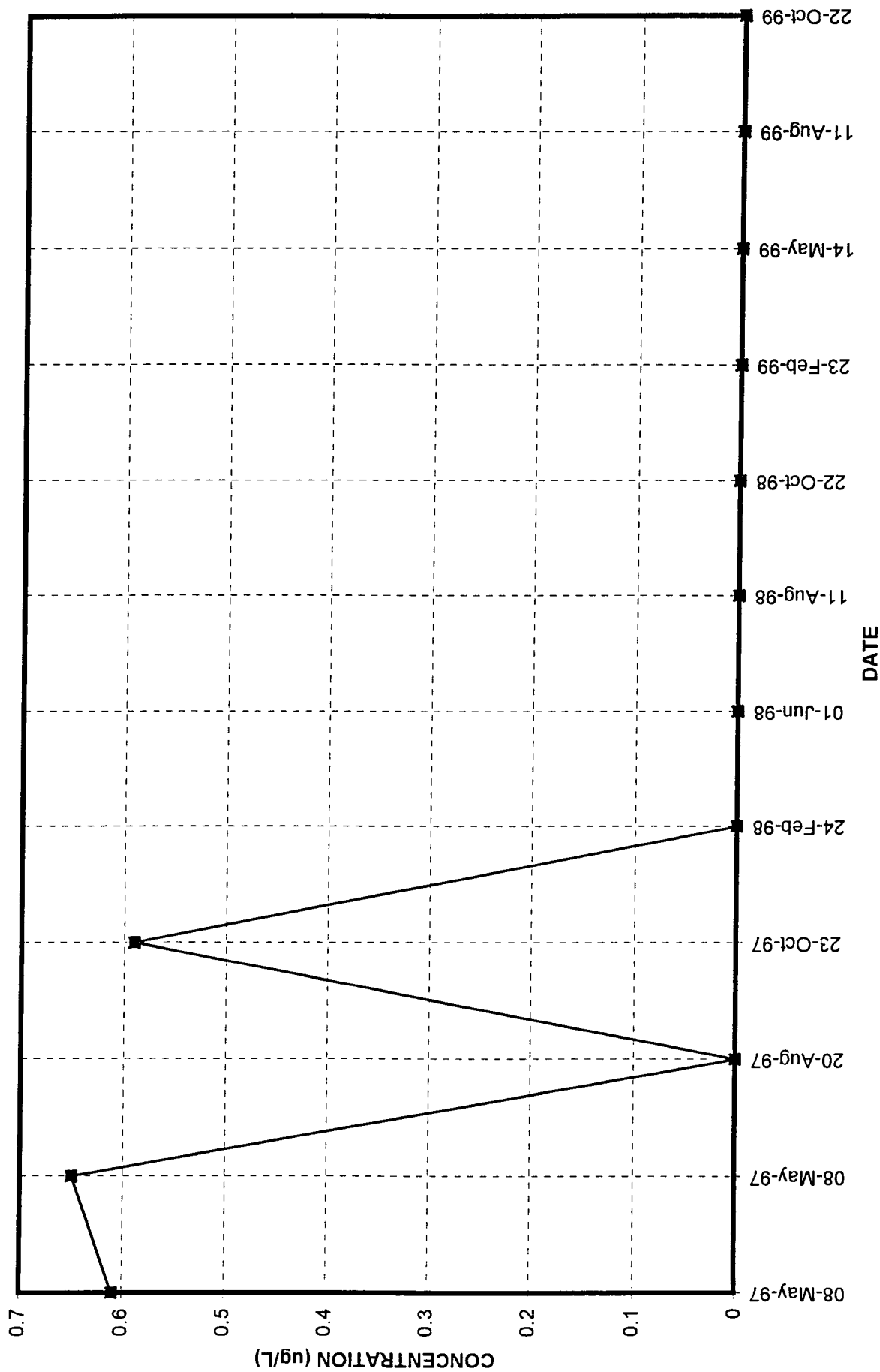
MONITOR WELL ACW-13



CHLORIDE
SODIUM

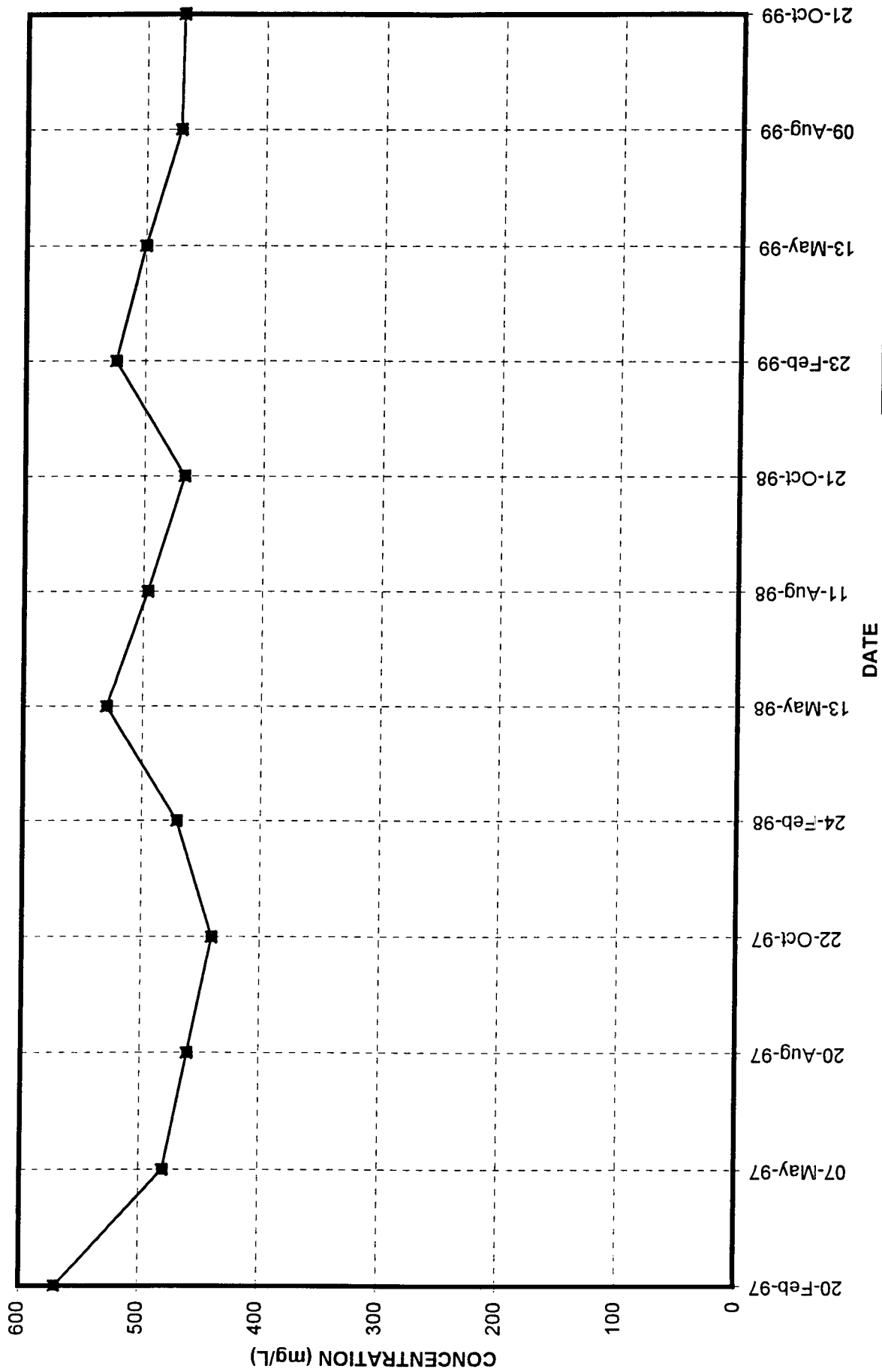
GRAPH 35

MONITOR WELL ACW-13



GRAPH 36

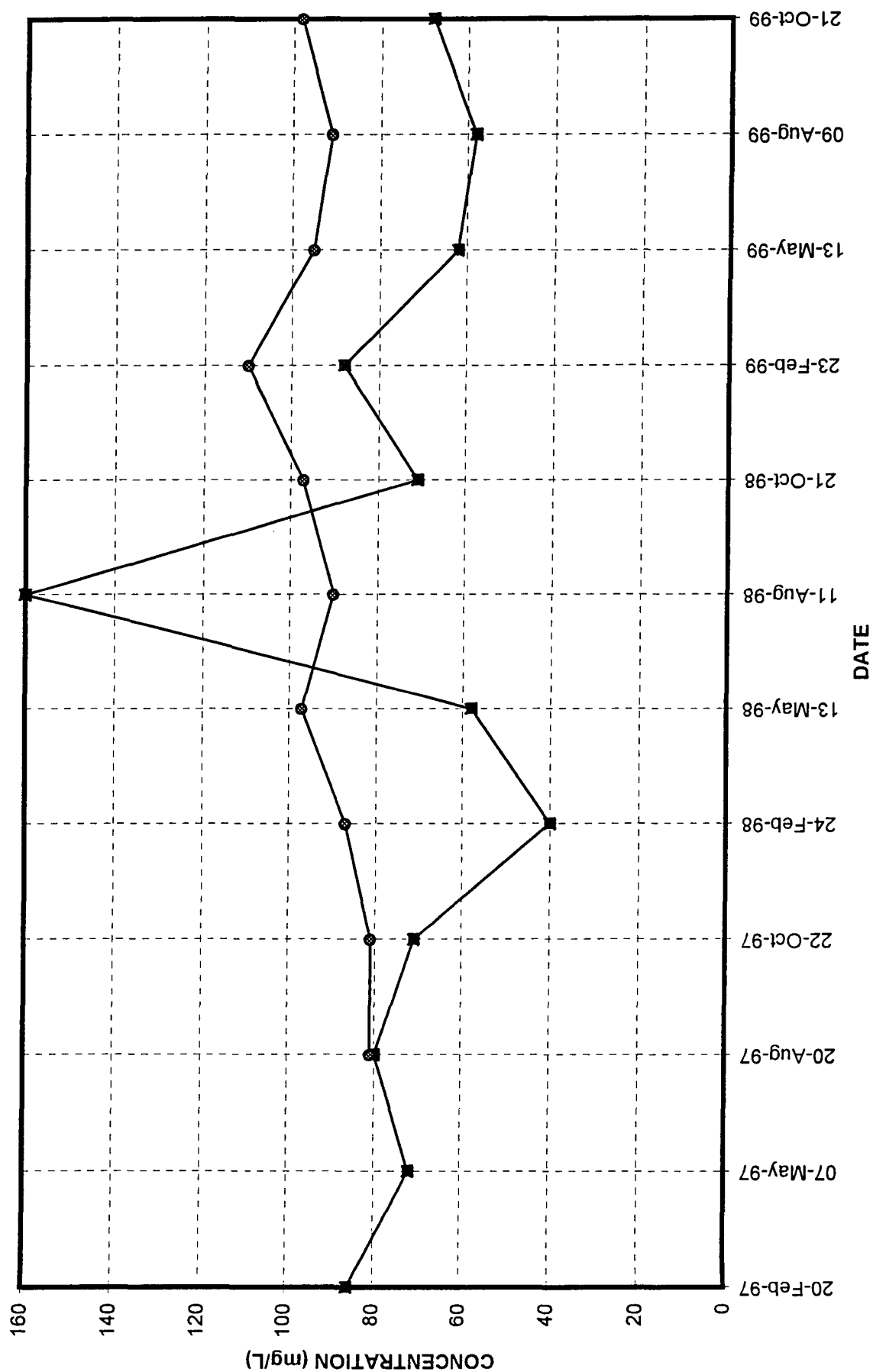
MONITOR WELL ACW-14



—■— TOTAL DISSOLVED SOLIDS

GRAPH 37

MONITOR WELL ACW-14

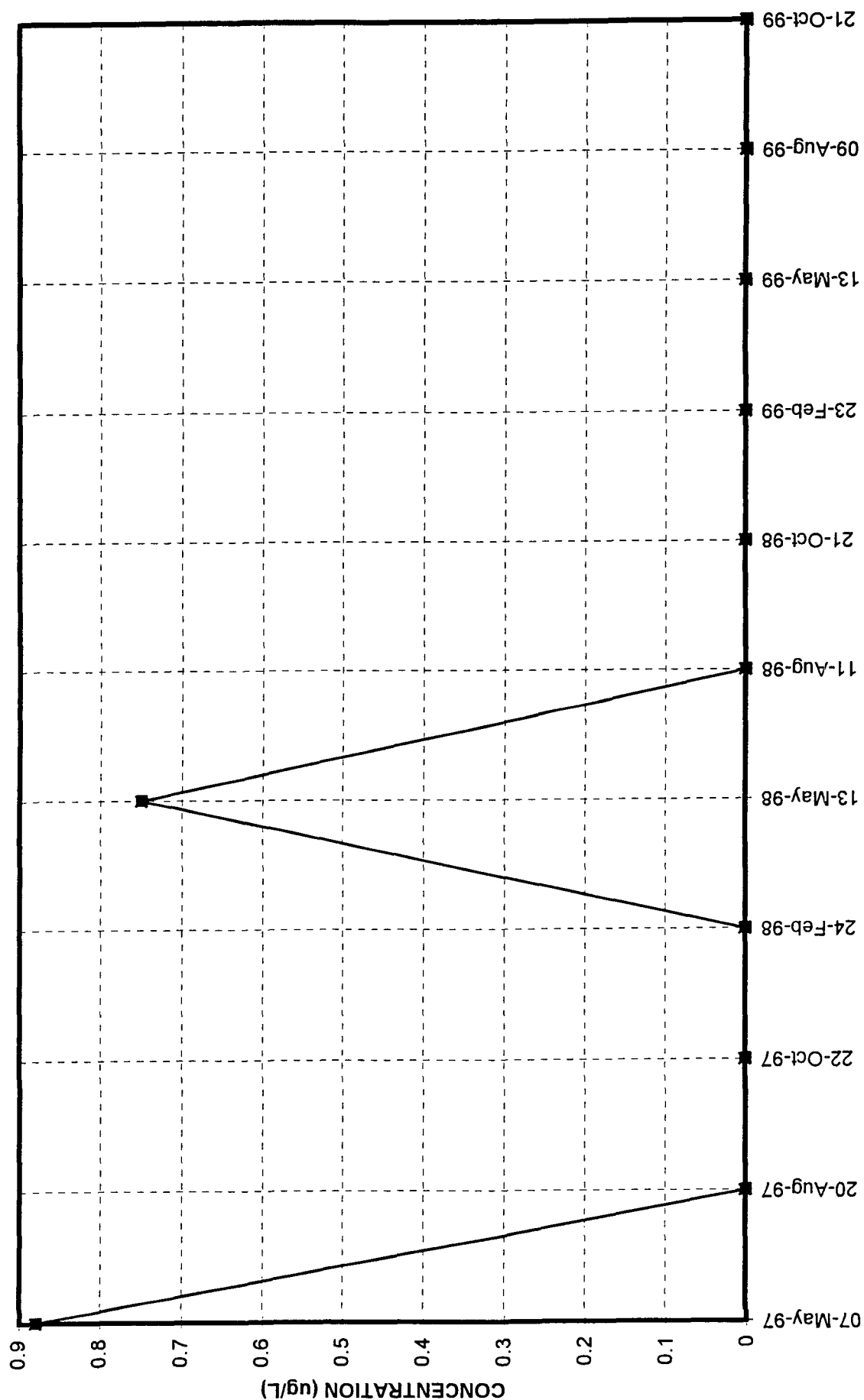


CHLORIDE
SODIUM

GRAPH 38

GRAPH 39

MONITOR WELL ACW-14



APPENDICES

APPENDIX A

**CONSTRUCTION INFORMATION
FOR NEWLY INSTALLED
MONITOR WELL ACW-17**



Highlander Environmental Corp.

Midland, Texas

Mr. Gerry Garibay
El Paso Energy
1001 Louisiana St.
Rm. W-520-A
Houston, Texas 77002

***RE: Summary of Field activities, Monitor Well ACW-17
Jal #4 Gas Plant
Lea County, New Mexico***

Drilling of Monitor Well, ACW-17, commenced at 12:05 PM on October 19, 1999 and was completed at 5:30 PM on October 20, 1999. Scarborough Drilling of LaMesa, Texas, was contracted to drill Monitor Well ACW-17 at the Jal #4 Gas Plant. The well boring was located and staked by El Paso Energy personnel. The drilling rig was cleaned and decontaminated prior to moving in on location.

All drilling activities conformed to state and local regulations and were supervised by Mike Jacobs, Hydrogeologist with Highlander Environmental Corp. A log of drilling activities was kept in a bound field notebook. Information in the logbook includes location, time on site, personnel and equipment present, materials used, and any other observations or information that would be necessary to reconstruct field activities at a later date. The total depth of the borehole is 174 feet below ground surface. The Triassic Chinle Formation was encountered at approximately 169 feet below ground surface. Enclosed is the well log for ACW-17 showing the borehole lithology and well construction diagram.

Drilling fluids consisted of fresh water and/or mud. Water for drilling was acquired from a non-contaminated water supply well at the Jal #4 Plant. Drilling mud consisted of 100 percent sodium bentonite.

All of the casing was new, unused, 4-inch polyvinyl chloride (PVC) conforming to the ASTM Standard F-480-88A. The casing was straight and plumb within the tolerance stated for the borehole. The casing is set from a depth of 150 feet below ground surface to approximately 2 feet above ground.

All requirements that applied to casing also applied to well screen, except for strength requirements. The screens were factory slotted and sized (.01 slot) to prevent 90 percent of the filter pack from entering the well. The screened interval is from 150 feet to 170 feet below ground surface. The bottom of the screen was capped, and the cap shall was joined to the screen by threads.

The annular space was filled with a filter pack, a bentonite seal, and casing grout (to surface) between the well string and the borehole wall. Drilling fluids were thinned with potable water before the annular space was filled. The drilling fluids were removed by vacuum truck. As the annular space was being filled, the well string was centered and suspended such that it did not rest on the bottom of the hole.

The filter pack consisted of clean, inert, and well-rounded silica sand and extended from the bottom of the hole to at least three feet above the top of the well screen (147 feet below ground surface). The top of the sand pack was sounded to verify its depth during placement.

The bentonite consisted of four feet of bentonite between the filter pack and the casing grout; the bentonite was hydrated before placement. 100 percent sodium bentonite was used. The casing grout extended from the top of the bentonite seal (143 feet below ground surface) to ground surface.

An above-ground surface completion was used extending the well casing approximately two feet above land surface. A casing cap was provided for the well, and a protective steel sleeve was placed over the casing and cap and seated in a 3-foot by 3-foot by 4-inch concrete pad.



Highlander appreciates the opportunity to work for you on this project and looks forward to the next phase of the project. I am currently reviewing the data and am preparing a set of recommendations and proposals to complete the remediation efforts at the Jal #4 Gas Plant. Please call me at (915) 682-4559 if you have questions.

Sincerely,
Highlander Environmental Corp.



Mike Jacobs
Project Manager/Hydrogeologist



Project No:

Well ID: ACW-17

Project: Jal Gas Plant #4

Client: El Paso Energy

Enclosure:

Location: Lea County, New Mexico

Engineer: Mike Jacobs

Depth	Geological Unit	Description	Depth/Elev.	Well Construction	Remarks
0		Ground Surface	0		
5		Tan, very-fine, fine-grained sand well-sorted	10		
10			-10		
15		caliche, white, buff, tan			
20			20		
25			-20		
30		interbedded very fine sands, silty sands, and silts			
35					
40		very fine sands and silts			
45					
50					

Drilled By: Scarborough Drilling, LaMesa, TX

Highlander Environ. Corp.

Hole Size: 7-7/8"

Drill Method: Mud Rotary

1910 N. Big Spring
Midland, Texas 79705
Off: 915-682-4559

Datum: Ground Surface

Drill Date: 10/19/99

Sheet: 1 of 4

Project No:

Well ID: ACW-17

Project: Jal Gas Plant #4

Client: El Paso Energy

Enclosure:

Location: Lea County, New Mexico

Engineer: Mike Jacobs

Depth	Geological Unit	Description	Depth/Elev.	Well Construction	Remarks
55					
60		interbedded silts and sands			
65					
70		reddish brown, very fine-grained sands and silts			
75					
80					
85					
90		interbedded fine sands and silts			
95					
100					

Drilled By: Scarborough Drilling, LaMesa, TX

Highlander Environ. Corp.

Hole Size: 7-7/8"

Drill Method: Mud Rotary

1910 N. Big Spring

Datum: Ground Surface

Midland, Texas 79705

Off: 915-682-4559

Drill Date: 10/19/99

Sheet: 2 of 4

Project No:

Well ID: ACW-17

Project: Jal Gas Plant #4

Client: El Paso Energy

Enclosure:

Location: Lea County, New Mexico

Engineer: Mike Jacobs

Depth	Geological Unit	Description	Depth/Elev.	Well Construction	Remarks
105		reddish brown, very fine, fine-grained sands, silts	105 -105		
110					
115		medium-coarse gravel lensed interbedded with fine-medium grained sands			
120					
125			125 -125		
130					
135		interbedded silty sands, silts and clay			
140					cement and bentonite slurry to surface
145					top of bentonite seal
150		interbedded silty sands, silts and clay			top of sand filter pack
					top of screen, screen interval 150-170'

Drilled By: Scarborough Drilling, LaMesa, TX

Highlander Environ. Corp.

Hole Size: 7-7/8"

Drill Method: Mud Rotary

1910 N. Big Spring

Datum: Ground Surface

Midland, Texas 79705

Off: 915-682-4559

Drill Date: 10/19/99

Sheet: 3 of 4

Project No:

Well ID: ACW-17

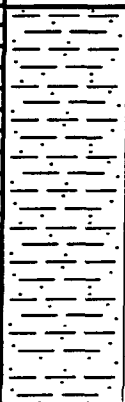
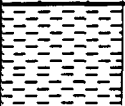
Project: Jal Gas Plant #4

Client: El Paso Energy

Enclosure:

Location: Lea County, New Mexico

Engineer: Mike Jacobs

Depth	Geological Unit	Description	Depth/Elev.	Well Construction	Remarks
155		interbedded silty sands, silts and clay			
160					
165					
170		red clays and silty clays	169		
175		End of Borehole	-169		
180			174		
185			-174		
190					
195					
200					

Drilled By: Scarborough Drilling, LaMesa, TX

Highlander Environ. Corp.

Hole Size: 7-7/8"

Drill Method: Mud Rotary

1910 N. Big Spring

Datum: Ground Surface

Midland, Texas 79705

Off: 915-682-4559

Drill Date: 10/19/99

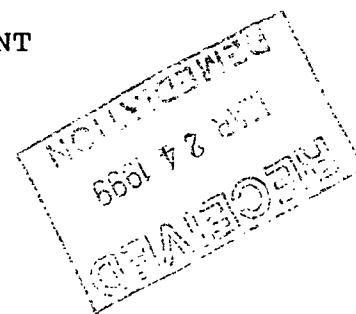
Sheet: 4 of 4

APPENDIX B

**LABORATORY ANALYTICAL REPORTS
FOR GROUNDWATER SAMPLES
COLLECTED DURING 1999**

SAMPLE KEY

SAMPLE NUMBER: S99-0077 LOCATION: JAL #4 PLANT
MATRIX: WATER
SAMPLE DESCRIPTION: FIELD BLANK
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 07:35 SAMPLE DATE: 02/23/99



SAMPLE KEY

SAMPLE NUMBER: S99-0078 LOCATION: JAL #4 PLANT
MATRIX: WATER
SAMPLE DESCRIPTION: BAILER BLANK BEFORE
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:05 SAMPLE DATE: 02/23/99

SAMPLE KEY

SAMPLE NUMBER: S99-0079 LOCATION: JAL #4 PLANT
MATRIX: WATER
SAMPLE DESCRIPTION: PUMP BLANK BEFORE EMP#3
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:20 SAMPLE DATE: 02/23/99

SAMPLE KEY

SAMPLE NUMBER: S99-0080 LOCATION: JAL #4 PLANT
MATRIX: WATER
SAMPLE DESCRIPTION: MONITOR WELL ACW#15
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:14 SAMPLE DATE: 02/23/99

SAMPLE KEY

SAMPLE NUMBER: S99-0081 LOCATION: JAL #4 PLANT
MATRIX: WATER
SAMPLE DESCRIPTION: PRODUCTION WELL DOOMS
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:20 SAMPLE DATE: 02/23/99

SAMPLE KEY

SAMPLE NUMBER: S99-0082 LOCATION: JAL #4 PLANT
MATRIX: WATER
SAMPLE DESCRIPTION: PRODUCTION WELL OXY
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:15 SAMPLE DATE: 02/23/99

SAMPLE KEY

SAMPLE NUMBER: S99-0083 LOCATION: JAL #4 PLANT
MATRIX: WATER
SAMPLE DESCRIPTION: MONITOR WELL ACW#12
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:15 SAMPLE DATE: 02/23/99

SAMPLE KEY

SAMPLE NUMBER: S99-0084 LOCATION: JAL #4 PLANT
MATRIX: WATER
SAMPLE DESCRIPTION: MONITOR WELL ACW#12 DUP
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:55 SAMPLE DATE: 02/23/99

SAMPLE KEY

SAMPLE NUMBER: S99-0085 LOCATION: JAL #4 PLANT
MATRIX: WATER
SAMPLE DESCRIPTION: MONITOR WELL ACW#13
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:40 SAMPLE DATE: 02/23/99

SAMPLE KEY

SAMPLE NUMBER: S99-0086 LOCATION: JAL #4 PLANT
MATRIX: WATER
SAMPLE DESCRIPTION: PUMP BLANK AFTER EMP#3
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 16:00 SAMPLE DATE: 02/23/99

SAMPLE KEY

SAMPLE NUMBER: S99-0087 LOCATION: JAL #4 PLANT
MATRIX: WATER
SAMPLE DESCRIPTION: BAILER BLANK AFTER SAMPLING
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 16:05 SAMPLE DATE: 02/23/99

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Burbank

Reno Division
1030 Matley Lane • Reno, Nevada 89502
(702) 348-2522 • Fax: (702) 348-2546
1-800-368-5221

CLIENT: El Paso Natural Gas Co.
8645 Railroad Dr.
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME:
PROJECT #:

NEL ORDER ID: P9902069

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 2/25/99.

Samples were analyzed as received.

Where applicable we have included the following quality control data:

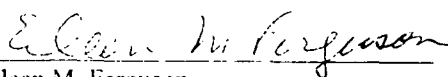
Method blank - used to demonstrate absence of contamination or interferences in the analytical process.
Laboratory Control Spike (LCS) - used to demonstrate laboratory ability to perform the method within specifications by spiking representative analytes into a clean matrix.
Surrogates - compounds added to each sample to ensure that the method requirements are met for each individual sample.

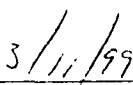
Should you have any questions or comments, please feel free to contact our Client Services department at: (602) 437-0099.

For TDS analysis samples S99-0080 and S99-0087 were originally analyzed within holding times, but the analytical results did not meet QC requirements. The second analysis passed QC requirements, but was performed beyond holding time.

Some results have been flagged as follows:

Ha - Sample was analyzed beyond hold time for this parameter.
Hr - Sample received beyond holding time for this parameter.
RL - Reporting limit raised due to sample matrix interference.


Eileen M. Ferguson
Laboratory Manager


Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0077
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-01

TEST: Cations
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Silica	ND	1. mg/L	5	EPA 200.8	3/1/99	3/2/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0078
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-02

TEST: Cations
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Silica	ND	1. mg/L	5	EPA 200.8	3/1/99	3/2/99
Sodium	0.27	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0079
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-03

TEST: Cations
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	52	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Magnesium	14	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Potassium	4.2	1. mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Silica	18	1. mg/L	5	EPA 200.8	3/1/99	3/2/99
Sodium	190	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0080
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-04

TEST: Cations
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	47	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Magnesium	17	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Potassium	6.0	1. mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Silica	25	1. mg/L	5	EPA 200.8	3/1/99	3/2/99
Sodium	110	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0083
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-05

TEST: Cations
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	200	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Magnesium	73	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Potassium	8.8	1. mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Silica	25	1. mg/L	5	EPA 200.8	3/1/99	3/2/99
Sodium	160	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0084
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-06

TEST: Cations
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	190	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Magnesium	68	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Potassium	8.5	1. mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Silica	26	1. mg/L	5	EPA 200.8	3/1/99	3/2/99
Sodium	160	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0085
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-07

TEST: Cations
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	44	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Magnesium	15	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Potassium	7.0	1. mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Silica	23	1. mg/L	5	EPA 200.8	3/1/99	3/2/99
Sodium	110	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0086
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-08

TEST: Cations
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	51	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Magnesium	14	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Potassium	4.7	1. mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Silica	18	1. mg/L	5	EPA 200.8	3/1/99	3/2/99
Sodium	270	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0087
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-09

TEST: Cations
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Silica	ND	1. mg/L	5	EPA 200.8	3/1/99	3/2/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: **Method Blank**
DATE SAMPLED: NA
NEL SAMPLE ID: P02069i-CAT-BLK

TEST: **Cations**

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: **Metals**

CLIENT ID: **Method Blank**
DATE SAMPLED: NA
NEL SAMPLE ID: P02069M-Si-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	5	EPA 200.8	3/1/99	3/2/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0077
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	ND			1	SM 2320 B	mg/L	3/2/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	3/2/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	3/2/99
Alkalinity, Total	ND	25.		1	SM 2320 B	mg/L	3/2/99
Bromide	ND	0.2		1	EPA 300.0	mg/L	3/3/99
Chloride	ND	0.1		1	EPA 300.0	mg/L	3/3/99
Fluoride	ND	0.4		1	SM 4500-F C	mg/L	3/4/99
Hardness, Total (as CaCO3)	ND	1.		0.5	EPA 200.7	mg/L	2/28/99
Nitrate/Nitrite as N, Total	ND	0.05		1	SM 4500-NO3 F	mg/L-N	3/1/99
pH	5.35	Hr	2.	1	EPA 150.1	pH Units	2/26/99
pH Temperature	14.8	Hr	1.	1	EPA 150.1	°C	2/26/99
Specific Conductance	2.46		1.	1	SM 2510 B	µS/cm	2/26/99
Sulfate	ND	0.1		1	EPA 300.0	mg/L	3/3/99
Total Dissolved Solids	ND	25.		1	SM 2540 C	mg/L	3/1/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0078
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	3/2/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	3/2/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	3/2/99
Alkalinity, Total	ND	25.	1	SM 2320 B	mg/L	3/2/99
Bromide	ND	0.2	1	EPA 300.0	mg/L	3/3/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	3/3/99
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	3/4/99
Hardness, Total (as CaCO ₃)	ND	1.	0.5	EPA 200.7	mg/L	2/28/99
Nitrate/Nitrite as N, Total	0.09	0.05	1	SM 4500-NO ₃ F	mg/L-N	3/1/99
pH	5.83	Hr 2.	1	EPA 150.1	pH Units	2/26/99
pH Temperature	14.3	Hr 1.	1	EPA 150.1	°C	2/26/99
Specific Conductance	2.17	1.	1	SM 2510 B	µS/cm	2/26/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	3/3/99
Total Dissolved Solids	ND	25.	1	SM 2540 C	mg/L	3/1/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0079
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
			LIMIT				
Alkalinity - Bicarbonate	170			1	SM 2320 B	mg/L	3/2/99
Alkalinity - Carbonate	6			1	SM 2320 B	mg/L	3/2/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	3/2/99
Alkalinity, Total	180		25.	1	SM 2320 B	mg/L	3/2/99
Bromide	ND	RL	2.	10	EPA 300.0	mg/L	3/3/99
Chloride	210		5.	50	EPA 300.0	mg/L	3/3/99
Fluoride	1.7		0.4	1	SM 4500-F C	mg/L	3/4/99
Hardness, Total (as CaCO3)	180		1.	0.5	EPA 200.7	mg/L	2/28/99
Nitrate/Nitrite as N, Total	ND		0.05	1	SM 4500-NO3 F	mg/L-N	3/1/99
pH	8.44	Hr	2.	1	EPA 150.1	pH Units	2/26/99
pH Temperature	14.1	Hr	1.	1	EPA 150.1	°C	2/26/99
Specific Conductance	1170		1.	1	SM 2510 B	µS/cm	2/26/99
Sulfate	42		5.	50	EPA 300.0	mg/L	3/3/99
Total Dissolved Solids	681		25.	1	SM 2540 C	mg/L	3/1/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0080
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-04

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
			LIMIT				
Alkalinity - Bicarbonate	180			1	SM 2320 B	mg/L	3/2/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	3/2/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	3/2/99
Alkalinity, Total	180		25.	1	SM 2320 B	mg/L	3/2/99
Bromide	0.3		0.2	1	EPA 300.0	mg/L	3/3/99
Chloride	88		5.	50	EPA 300.0	mg/L	3/3/99
Fluoride	1.8		0.4	1	SM 4500-F C	mg/L	3/4/99
Hardness, Total (as CaCO3)	190		1.	0.5	EPA 200.7	mg/L	2/28/99
Nitrate/Nitrite as N, Total	1.9		0.5	10	SM 4500-NO3 F	mg/L-N	3/5/99
pH	7.92	Hr	2.	1	EPA 150.1	pH Units	2/26/99
pH Temperature	12.2	Hr	1.	1	EPA 150.1	°C	2/26/99
Specific Conductance	859		1.	1	SM 2510 B	µS/cm	2/26/99
Sulfate	92		5.	50	EPA 300.0	mg/L	3/3/99
Total Dissolved Solids	524	Ha	25.	1	SM 2540 C	mg/L	3/5/99

D.F. Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0083
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-05

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
			LIMIT				
Alkalinity - Bicarbonate	160			1	SM 2320 B	mg/L	3/2/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	3/2/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	3/2/99
Alkalinity, Total	160		25.	1	SM 2320 B	mg/L	3/2/99
Bromide	ND	RL	2.	10	EPA 300.0	mg/L	3/3/99
Chloride	500		10.	100	EPA 300.0	mg/L	3/3/99
Fluoride	1.2		0.4	1	SM 4500-F C	mg/L	3/4/99
Hardness, Total (as CaCO3)	810		1.	0.5	EPA 200.7	mg/L	2/28/99
Nitrate/Nitrite as N, Total	0.18		0.05	1	SM 4500-NO3 F	mg/L-N	3/1/99
pH	7.68	Hr	2.	1	EPA 150.1	pH Units	2/26/99
pH Temperature	12.3	Hr	1.	1	EPA 150.1	°C	2/26/99
Specific Conductance	2020		1.	1	SM 2510 B	µS/cm	2/26/99
Sulfate	120		10.	100	EPA 300.0	mg/L	3/3/99
Total Dissolved Solids	1240		25.	1	SM 2540 C	mg/L	3/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0084
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-06

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING LIMIT	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate	160		1	SM 2320 B	mg/L	3/2/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	3/2/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	3/2/99
Alkalinity, Total	160	25.	1	SM 2320 B	mg/L	3/2/99
Bromide	ND RL	2.	10	EPA 300.0	mg/L	3/3/99
Chloride	480	25.	250	EPA 300.0	mg/L	3/5/99
Fluoride	1.1	0.4	1	SM 4500-F C	mg/L	3/4/99
Hardness, Total (as CaCO ₃)	750	1.	0.5	EPA 200.7	mg/L	2/28/99
Nitrate/Nitrite as N, Total	0.23	0.05	1	SM 4500-NO ₃ F	mg/L-N	3/1/99
pH	7.67 Hr	2.	1	EPA 150.1	pH Units	2/26/99
pH Temperature	12.8 Hr	1.	1	EPA 150.1	°C	2/26/99
Specific Conductance	2050	1.	1	SM 2510 B	µS/cm	2/26/99
Sulfate	140	10.	100	EPA 300.0	mg/L	3/3/99
Total Dissolved Solids	1280	25.	1	SM 2540 C	mg/L	3/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0085
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-07

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	180			1	SM 2320 B	mg/L	3/2/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	3/2/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	3/2/99
Alkalinity, Total	180	25.		1	SM 2320 B	mg/L	3/2/99
Bromide	0.3	0.2		1	EPA 300.0	mg/L	3/3/99
Chloride	74	5.		50	EPA 300.0	mg/L	3/3/99
Fluoride	1.5	0.4		1	SM 4500-F C	mg/L	3/4/99
Hardness, Total (as CaCO3)	170	1.		0.5	EPA 200.7	mg/L	2/28/99
Nitrate/Nitrite as N, Total	0.74	0.05		1	SM 4500-NO3 F	mg/L-N	3/5/99
pH	8.18	Hr	2.	1	EPA 150.1	pH Units	2/26/99
pH Temperature	12.6	Hr	1.	1	EPA 150.1	°C	2/26/99
Specific Conductance	792		1.	1	SM 2510 B	µS/cm	2/26/99
Sulfate	93		5.	50	EPA 300.0	mg/L	3/3/99
Total Dissolved Solids	493		25.	1	SM 2540 C	mg/L	3/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0086
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-08

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	REPORTING		D. F.	METHOD	UNITS	ANALYZED
	RESULT	LIMIT				
Alkalinity - Bicarbonate	160		1	SM 2320 B	mg/L	3/2/99
Alkalinity - Carbonate	16		1	SM 2320 B	mg/L	3/2/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	3/2/99
Alkalinity, Total	180	25.	1	SM 2320 B	mg/L	3/2/99
Bromide	ND	RL 2.	10	EPA 300.0	mg/L	3/3/99
Chloride	350	10.	100	EPA 300.0	mg/L	3/3/99
Fluoride	1.8	0.4	1	SM 4500-F C	mg/L	3/4/99
Hardness, Total (as CaCO ₃)	190	1.	0.5	EPA 200.7	mg/L	2/28/99
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO ₃ F	mg/L-N	3/1/99
pH	8.66	Hr 2.	1	EPA 150.1	pH Units	2/26/99
pH Temperature	13.5	Hr 1.	1	EPA 150.1	°C	2/26/99
Specific Conductance	1610	1.	1	SM 2510 B	µS/cm	2/26/99
Sulfate	45	10.	100	EPA 300.0	mg/L	3/3/99
Total Dissolved Solids	981	25.	1	SM 2540 C	mg/L	3/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0087
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-09

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
			LIMIT				
Alkalinity - Bicarbonate	ND			1	SM 2320 B	mg/L	3/2/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	3/2/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	3/2/99
Alkalinity, Total	ND		25.	1	SM 2320 B	mg/L	3/2/99
Bromide	ND		0.2	1	EPA 300.0	mg/L	3/3/99
Chloride	ND		0.1	1	EPA 300.0	mg/L	3/3/99
Fluoride	ND		0.4	1	SM 4500-F C	mg/L	3/4/99
Hardness, Total (as CaCO3)	ND		1.	0.5	EPA 200.7	mg/L	2/28/99
Nitrate/Nitrite as N, Total	ND		0.05	1	SM 4500-NO3 F	mg/L-N	3/1/99
pH	5.78	Hr	2.	1	EPA 150.1	pH Units	2/26/99
pH Temperature	16.9	Hr	1.	1	EPA 150.1	°C	2/26/99
Specific Conductance	1.35		1.	1	SM 2510 B	µS/cm	2/26/99
Sulfate	ND		0.1	1	EPA 300.0	mg/L	3/3/99
Total Dissolved Solids	ND	Ha	25.	1	SM 2540 C	mg/L	3/5/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990301NO2NO3-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>mg/L-N</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	3/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990301tds-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>mg/L</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	25	1	SM 2540 C	mg/L	3/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990302ALK-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>mg/L</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	3/2/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	3/2/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	3/2/99
Alkalinity, Total	ND	25	1	SM 2320 B	mg/L	3/2/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990303ICAQ2-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>mg/L</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	3/3/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	3/3/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	3/3/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990303ICAQ3-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>mg/L</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	3/3/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	3/3/99
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	3/3/99
Nitrite, as N	ND	0.1	1	EPA 300.0	mg/L-N	3/3/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	3/3/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990305ICAQ-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>mg/L</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	3/5/99
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	3/5/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	3/5/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0077
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-01

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: DJH - Reno Division
EXTRACTED: 3/3/99
ANALYZED: 3/3/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	99	86 - 115
Dibromofluoromethane	101	86 - 118
Toluene-d8	102	86 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0078
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-02

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: DJH - Reno Division
EXTRACTED: 3/3/99
ANALYZED: 3/3/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	99	86 - 115
Dibromofluoromethane	100	86 - 118
Toluene-d8	102	86 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0079
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-03

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: DJH - Reno Division
EXTRACTED: 3/3/99
ANALYZED: 3/3/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	99	86 - 115
Dibromofluoromethane	101	86 - 118
Toluene-d8	101	86 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0080
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-04

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: DJH - Reno Division
EXTRACTED: 3/3/99
ANALYZED: 3/3/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	99	86 - 115
Dibromofluoromethane	102	86 - 118
Toluene-d8	102	86 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0083
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-05

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: DJH - Reno Division
EXTRACTED: 3/3/99
ANALYZED: 3/3/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	6 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	98	86 - 115
Dibromofluoromethane	101	86 - 118
Toluene-d8	102	86 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:

CLIENT ID: S99-0084
 DATE SAMPLED: 2/23/99
 NEL SAMPLE ID: P9902069-06

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
 DILUTION: 1

ANALYST: DJH - Reno Division
 EXTRACTED: 3/3/99
 ANALYZED: 3/3/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	5 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	98	86 - 115
Dibromofluoromethane	101	86 - 118
Toluene-d8	101	86 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0085
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-07

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: DJH - Reno Division
EXTRACTED: 3/3/99
ANALYZED: 3/3/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	99	86 - 115
Dibromofluoromethane	101	86 - 118
Toluene-d8	102	86 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0086
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-08

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: DJH - Reno Division
EXTRACTED: 3/3/99
ANALYZED: 3/3/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	98	86 - 115
Dibromofluoromethane	101	86 - 118
Toluene-d8	102	86 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0087
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902069-09

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: DJH - Reno Division
EXTRACTED: 3/3/99
ANALYZED: 3/3/99

PARAMETER	Result	Reporting Limit
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	99	86 - 115
Dibromofluoromethane	101	86 - 118
Toluene-d8	102	86 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: **Method Blank**
DATE SAMPLED: NA
NEL SAMPLE ID: 030399-V1-BTEX8-BLK

TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**

MATRIX: Aqueous

ANALYST: DJH - Reno Division
EXTRACTED: 3/3/99
ANALYZED: 3/3/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	97	86 - 115
Dibromofluoromethane	100	86 - 118
Toluene-d8	101	86 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	030399-V1-BTEX8-LCS	20	21.7	109	76 - 127	
Benzene	P9902069-01-MS	50	50.6	101	76 - 127	
Toluene	030399-V1-BTEX8-LCS	20	22.6	113	76 - 125	
Toluene	P9902069-01-MS	50	51.6	103	76 - 125	
Ethylbenzene	030399-V1-BTEX8-LCS	20	18	90	76 - 127	
Ethylbenzene	P9902069-01-MS	50	45.6	91	76 - 127	
Total Xylenes	030399-V1-BTEX8-LCS	60	60.9	102	76 - 127	
Total Xylenes	P9902069-01-MS	150	144	96	76 - 127	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: **Inorganic Non-Metals**
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	990226cond-LCS	1412	1439	102	95 - 105	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	990226PH-LCS	7	7.02	100	99 - 101	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	990301NO2NO3-LCS	1	0.959	96	90 - 110	
Nitrate/Nitrite as N, Total	P9902069-08-MS	1	0.947	95	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: **Inorganic Non-Metals**
MATRIX: Drinking Water

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	990301tds-LCS	1000	1019	102	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	990302ALK-LCS	125	123.2	99	85 - 115	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990303ICAQ2-LCS	100	98	98	90 - 110	
Chloride	P9902069-03-MS	100	300	90	80 - 120	
Bromide	990303ICAQ2-LCS	100	100	100	90 - 110	
Bromide	P9902069-03-MS	100	96	96	80 - 120	
Sulfate	990303ICAQ2-LCS	100	100	100	90 - 110	
Sulfate	P9902069-03-MS	100	138	96	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: **Inorganic Non-Metals**
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990303ICAQ3-LCS	100	94	94	90 - 110	
Bromide	990303ICAQ3-LCS	100	97	97	90 - 110	
Bromide	P9902069-05-MS	100	101	101	80 - 120	
Sulfate	990303ICAQ3-LCS	100	96	96	90 - 110	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	990304faq-LCS	1	1.02	102	85 - 115	
Fluoride	P9902066-02-MS	1	1.07	107	80 - 120	
Fluoride	P9902066-02-MSD	1	1.11	111	80 - 120	3.7

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990305ICAQ-LCS	100	99	99	90 - 110	
Chloride	R9902100-01-MS	100	343	93	80 - 120	
Sulfate	990305ICAQ-LCS	100	99	99	90 - 110	
Sulfate	R9902100-01-MS	100	222	102	80 - 120	
Nitrate, as N	990305ICAQ-LCS	100	96	96	90 - 110	
Nitrate, as N	R9902100-01-MS	100	97	97	93 - 125	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	990305NO2NO3-LCS	1	1.02	102	90 - 110	
Nitrate/Nitrite as N, Total	R9902100-01-MS	1	1	100	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	990305TDS-LCS	1000	977	98	90 - 110	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Calcium	P02069i-CAT-LCS	20	20.9	105	85 - 115	
Calcium	P9902069-01-MS	20	21	105	75 - 125	
Calcium	P9902069-01-MSD	20	21.4	107	75 - 125	1.9
Magnesium	P02069i-CAT-LCS	20	20.9	105	85 - 115	
Magnesium	P9902069-01-MS	20	21.1	106	75 - 125	
Magnesium	P9902069-01-MSD	20	21.4	107	75 - 125	1.4
Potassium	P02069i-CAT-LCS	20	20.8	104	85 - 115	
Potassium	P9902069-01-MS	20	21	105	75 - 125	
Potassium	P9902069-01-MSD	20	21.5	108	75 - 125	2.4
Sodium	P02069i-CAT-LCS	20	21.5	108	85 - 115	
Sodium	P9902069-01-MS	20	21.7	109	75 - 125	
Sodium	P9902069-01-MSD	20	22	110	75 - 125	1.4

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Silica	P02069M-Si-LCS	10	9.27	93	85 - 115	
Silica	P9902069-01-MS	10	9.1	91	75 - 125	
Silica	P9902069-01-MSD	10	8.99	90	75 - 125	1.2

ND - Not Detected

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CHAIN OF CUSTODY RECORD

PROJECT NUMBER		PROJECT NAME		DATE		SAMPLERS (Signature)	
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	COMPOSITE OR GRAB	REQUESTED ANALYSIS
1101	01/15	11:00	H ₂ O	599-00177	5		ANALYSIS BTEX TDS SP. COND SFE ATTACHED
1102	01/15	11:00	H ₂ O	599-00178	5		
1103	01/15	11:00	H ₂ O	599-00179	5		
1104	01/15	11:00	H ₂ O	599-00180	5		
1105	01/15	11:00	H ₂ O	599-00181	5		
1106	01/15	11:00	H ₂ O	599-00182	5		
1107	01/15	11:00	H ₂ O	599-00183	5		
1108	01/15	11:00	H ₂ O	599-00184	5		
1109	01/15	11:00	H ₂ O	599-00185	5		
1110	01/15	11:00	H ₂ O	599-00186	5		
1111	01/15	11:00	H ₂ O	599-00187	5		
RELINQUISHED BY: (Signature) <u>[Signature]</u> DATE/TIME <u>01/15/01 01:00</u> RECEIVED BY: (Signature) <u>FED EX</u> DATE/TIME <u>01/15/01 01:00</u> RELINQUISHED BY: (Signature) <u>[Signature]</u> DATE/TIME <u>01/15/01 01:00</u> RECEIVED BY: (Signature) <u>FED EX</u> DATE/TIME <u>01/15/01 01:00</u>							
REQUESTED TURNAROUND TIME:				SAMPLE RECEIPT REMARKS			
ROUTINE ☐ RUSH ☐				RESULTS & INVOICES TO			
CARRIER CO:				CHARGE CODE			
BILL NO:				LABORATORY SERVICES EL PASO NATURAL GAS COMPANY 8645 RAILROAD DRIVE EL PASO, TEXAS 79904 915-759-2229 FAX: 915-759-2335			

White - Testing Laboratory Canary - EPNG Lab Pink - Field Sampler

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Burbank

Reno Division
1030 Matley Lane • Reno, Nevada 89502
(702) 348-2522 • Fax: (702) 348-2546
1-800-368-5221

CLIENT: El Paso Natural Gas Co.
8645 Railroad Dr.
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME:
PROJECT #:

NEL ORDER ID: P9902070

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 2/25/99.

Samples were analyzed as received.

Where applicable we have included the following quality control data:

Method blank - used to demonstrate absence of contamination or interferences in the analytical process.
Laboratory Control Spike (LCS) - used to demonstrate laboratory ability to perform the method within specifications by spiking representative analytes into a clean matrix.
Surrogates - compounds added to each sample to ensure that the method requirements are met for each individual sample.

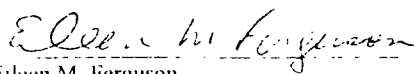
Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some results have been flagged as follows:

Hr - Sample received beyond holding time for this parameter.
Jl - The batch MS and/or MSD were outside acceptance limits. The LCS was acceptable.

Some QA results have been flagged as follows:

Jl - The batch MS and/or MSD were outside acceptance limits. The LCS was acceptable.


Eileen M. Ferguson
Laboratory Manager

3/11/99
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0081
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902070-01

TEST: Cations
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	48	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Magnesium	16	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Potassium	4.1	1. mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Silica	26 JI	1. mg/L	5	EPA 200.8	3/1/99	3/2/99
Sodium	72	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0082
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902070-02

TEST: Cations
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	80	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Magnesium	24	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Potassium	6.2	1. mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Silica	24	1. mg/L	5	EPA 200.8	3/1/99	3/2/99
Sodium	82	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: **Method Blank**
DATE SAMPLED: NA
NEL SAMPLE ID: P02069i-CAT-BLK

TEST: **Cations**

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	2/28/99	2/28/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	2/28/99	2/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P02070M-Si-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	5	EPA 200.8	3/1/99	3/2/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0081
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902070-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
			LIMIT				
Alkalinity - Bicarbonate	190			1	SM 2320 B	mg/L	2/27/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	2/27/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	2/27/99
Alkalinity, Total	190		25.	1	SM 2320 B	mg/L	2/27/99
Bromide	0.3		0.2	1	EPA 300.0	mg/L	3/3/99
Chloride	31		2.5	25	EPA 300.0	mg/L	3/3/99
Fluoride	0.89		0.4	1	SM 4500-F C	mg/L	3/4/99
Hardness, Total (as CaCO3)	190		1.	0.5	EPA 200.7	mg/L	2/28/99
Nitrate/Nitrite as N, Total	0.89		0.05	1	SM 4500-NO3 F	mg/L-N	3/1/99
pH	7.86	Hr	2.	1	EPA 150.1	pH Units	2/26/99
pH Temperature	14.9	Hr	1.	1	EPA 150.1	°C	2/26/99
Specific Conductance	627		1.	1	SM 2510 B	µS/cm	2/26/99
Sulfate	73		2.5	25	EPA 300.0	mg/L	3/3/99
Total Dissolved Solids	364		25.	1	SM 2540 C	mg/L	3/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: S99-0082
DATE SAMPLED: 2/23/99
NEL SAMPLE ID: P9902070-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	160			1	SM 2320 B	mg/L	2/27/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	2/27/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	2/27/99
Alkalinity, Total	160	25.		1	SM 2320 B	mg/L	2/27/99
Bromide	0.5	0.2		1	EPA 300.0	mg/L	3/3/99
Chloride	120	5.		50	EPA 300.0	mg/L	3/3/99
Fluoride	1.0	0.4		1	SM 4500-F C	mg/L	3/4/99
Hardness, Total (as CaCO3)	300	1.		0.5	EPA 200.7	mg/L	2/28/99
Nitrate/Nitrite as N, Total	0.71	0.05		1	SM 4500-NO3 F	mg/L-N	3/1/99
pH	7.99	Hr	2.	1	EPA 150.1	pH Units	2/26/99
pH Temperature	14.5	Hr	1.	1	EPA 150.1	°C	2/26/99
Specific Conductance	810		1.	1	SM 2510 B	µS/cm	2/26/99
Sulfate	45	5.		50	EPA 300.0	mg/L	3/3/99
Total Dissolved Solids	407	25.		1	SM 2540 C	mg/L	3/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990227alk-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>mg/L</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	2/1/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	2/1/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	2/1/99
Alkalinity, Total	ND	25	1	SM 2320 B	mg/L	2/1/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990301NO2NO3-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>mg/L-N</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	3/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990301tds-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>mg/L</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	25	1	SM 2540 C	mg/L	3/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990303ICAQ3-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>mg/L</u>	<u>ANALYZED</u>
		<u>LIMIT</u>	<u>D. F.</u>			
Bromide	ND	0.2	1	EPA 300.0	mg/L	3/3/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	3/3/99
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	3/3/99
Nitrite, as N	ND	0.1	1	EPA 300.0	mg/L-N	3/3/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	3/3/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:

CLIENT ID: S99-0081
 DATE SAMPLED: 2/23/99
 NEL SAMPLE ID: P9902070-01

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
 DILUTION: 1

ANALYST: DJH - Reno Division
 EXTRACTED: 3/3/99
 ANALYZED: 3/3/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	98	86 - 115
Dibromofluoromethane	101	86 - 118
Toluene-d8	102	86 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:

CLIENT ID: S99-0082
 DATE SAMPLED: 2/23/99
 NEL SAMPLE ID: P9902070-02

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
 DILUTION: 1

ANALYST: DJH - Reno Division
 EXTRACTED: 3/3/99
 ANALYZED: 3/3/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	98	86 - 115
Dibromofluoromethane	101	86 - 118
Toluene-d8	102	86 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 030399-V1-BTEX8-BLK

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous

ANALYST: DJH - Reno Division
EXTRACTED: 3/3/99
ANALYZED: 3/3/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	97	86 - 115
Dibromofluoromethane	100	86 - 118
Toluene-d8	101	86 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Volatile Organic Compounds by EPA 8260B, December 1996
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	030399-V1-BTEX8-LCS	20	21.7	109	76 - 127	
Benzene	P9902069-01-MS	50	50.6	101	76 - 127	
Toluene	030399-V1-BTEX8-LCS	20	22.6	113	76 - 125	
Toluene	P9902069-01-MS	50	51.6	103	76 - 125	
Ethylbenzene	030399-V1-BTEX8-LCS	20	18	90	76 - 127	
Ethylbenzene	P9902069-01-MS	50	45.6	91	76 - 127	
Total Xylenes	030399-V1-BTEX8-LCS	60	60.9	102	76 - 127	
Total Xylenes	P9902069-01-MS	150	144	96	76 - 127	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	990226cond-LCS	1412	1439	102	95 - 105	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: **Inorganic Non-Metals**
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	990226PH-LCS	7	7.02	100	99 - 101	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	990227alk-LCS	125	123	98	85 - 115	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	990301NO2NO3-LCS	1	0.959	96	90 - 110	
Nitrate/Nitrite as N, Total	P9902069-08-MS	1	0.947	95	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Drinking Water

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	990301tds-LCS	1000	1019	102	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990303ICAQ3-LCS	100	94	94	90 - 110	
Bromide	990303ICAQ3-LCS	100	97	97	90 - 110	
Bromide	P9902069-05-MS	100	101	101	80 - 120	
Sulfate	990303ICAQ3-LCS	100	96	96	90 - 110	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	990304faq-LCS	1	1.02	102	85 - 115	
Fluoride	P9902066-02-MS	1	1.07	107	80 - 120	
Fluoride	P9902066-02-MSD	1	1.11	111	80 - 120	3.7

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Calcium	P02069i-CAT-LCS	20	20.9	105	85 - 115	
Calcium	P9902069-01-MS	20	21	105	75 - 125	
Calcium	P9902069-01-MSD	20	21.4	107	75 - 125	1.9
Magnesium	P02069i-CAT-LCS	20	20.9	105	85 - 115	
Magnesium	P9902069-01-MS	20	21.1	106	75 - 125	
Magnesium	P9902069-01-MSD	20	21.4	107	75 - 125	1.4
Potassium	P02069i-CAT-LCS	20	20.8	104	85 - 115	
Potassium	P9902069-01-MS	20	21	105	75 - 125	
Potassium	P9902069-01-MSD	20	21.5	108	75 - 125	2.4
Sodium	P02069i-CAT-LCS	20	21.5	108	85 - 115	
Sodium	P9902069-01-MS	20	21.7	109	75 - 125	
Sodium	P9902069-01-MSD	20	22	110	75 - 125	1.4

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Silica	P02070M-Si-LCS	10	8.86	89	85 - 115	
Silica	P9902070-01-MS	10	33.1	71 JI	75 - 125	
Silica	P9902070-01-MSD	10	37	110	75 - 125	43.1

ND - Not Detected

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CHAIN OF CUSTODY RECORD

Page 1 of 1

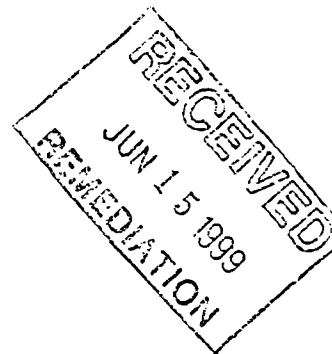
PROJECT NUMBER		PROJECT NAME		DATE:		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS				CONTRACT LABORATORY	
SAMPLERS: (Signature)		DATE		DATE		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS				CONTRACT LABORATORY	
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS				CONTRACT LABORATORY		
21119	11/20	11:00	H ₂ O	599-0081	5		X	X	X	X	X	X	X	21119	11/20
21119	11/20	11:00	H ₂ O	599-0082	5		X	X	X	X	X	X	X	21119	11/20
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME	
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME	
REQUESTED TURNAROUND TIME:				SAMPLE RECEIPT REMARKS				RESULTS & INVOICES TO:							
ROUTINE ☐ RUSH ☐															
CARRIER CO.				CHARGE CODE				LABORATORY SERVICES							
BILL NO.:								EL PASO NATURAL GAS COMPANY							
								8645 RAILROAD DRIVE							
								EL PASO TEXAS 79904							
								915-759-2229 FAX 915-759-2335							

White - Testing Laboratory Canary - EPNG Lab Pink - Field Sampler



SAMPLE KEY

SAMPLE NUMBER: M99-0001 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Field Blank
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:55 SAMPLE DATE: 05/10/99



SAMPLE KEY

SAMPLE NUMBER: M99-0002 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Bailer Blank before sampling
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 16:00 SAMPLE DATE: 05/10/99

SAMPLE KEY

SAMPLE NUMBER: M99-0003 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: EMP #3 Before Purging Wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 16:03 SAMPLE DATE: 05/10/99

SAMPLE KEY

SAMPLE NUMBER: M99-0004 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ENSR#1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:10 SAMPLE DATE: 05/11/99

SAMPLE KEY

SAMPLE NUMBER: M99-0005 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW #1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:25 SAMPLE DATE: 05/11/99

SAMPLE KEY

SAMPLE NUMBER: M99-0006 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ENSR #3
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:45 SAMPLE DATE: 05/11/99

SAMPLE KEY

SAMPLE NUMBER: M99-0007 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ENSR #3DUP.
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:45 SAMPLE DATE: 05/11/99

SAMPLE KEY

SAMPLE NUMBER: M99-0008 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: PTP #1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:59 SAMPLE DATE: 05/11/99

SAMPLE KEY

SAMPLE NUMBER: M99-0009 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ENSR #2
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 14:00 SAMPLE DATE: 05/11/99

SAMPLE KEY

SAMPLE NUMBER: M99-0010 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW #8
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:25 SAMPLE DATE: 05/11/99

SAMPLE KEY

SAMPLE NUMBER: M99-0011 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW #3
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:20 SAMPLE DATE: 05/12/99

SAMPLE KEY

SAMPLE NUMBER: M99-0012 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW #4
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:05 SAMPLE DATE: 05/12/99

SAMPLE KEY

SAMPLE NUMBER: M99-0013 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW #2A
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:55 SAMPLE DATE: 05/12/99

SAMPLE KEY

SAMPLE NUMBER: M99-0014 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW #11
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:26 SAMPLE DATE: 05/12/99

SAMPLE KEY

SAMPLE NUMBER: M99-0015 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: EMP#3 middle
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:45 SAMPLE DATE: 05/12/99

SAMPLE KEY

SAMPLE NUMBER: M99-0016 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Bailer blank middle
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:47 SAMPLE DATE: 05/12/99

SAMPLE KEY

SAMPLE NUMBER: M99-0017 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW #7
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:36 SAMPLE DATE: 05/12/99

SAMPLE KEY

SAMPLE NUMBER: M99-0018 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Production Well Dcoms
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:45 SAMPLE DATE: 05/13/99

SAMPLE KEY

SAMPLE NUMBER: M99-0019 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW#6
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:24 SAMPLE DATE: 05/13/99

SAMPLE KEY

SAMPLE NUMBER: M99-0020 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW#5
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:43 SAMPLE DATE: 05/13/99

SAMPLE KEY

SAMPLE NUMBER: M99-0021 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW#15
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:43 SAMPLE DATE: 05/13/99

SAMPLE KEY

SAMPLE NUMBER: M99-0022 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW#9
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 14:58 SAMPLE DATE: 05/13/99

SAMPLE KEY

SAMPLE NUMBER: M99-0023 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW#10
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:00 SAMPLE DATE: 05/14/99

SAMPLE KEY

SAMPLE NUMBER: M99-0024 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW#12
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:43 SAMPLE DATE: 05/14/99

SAMPLE KEY

SAMPLE NUMBER: M99-0025 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Production Well "OXY"
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:13 SAMPLE DATE: 05/13/99

SAMPLE KEY

SAMPLE NUMBER: M99-0026 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW#12 DUP
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:43 SAMPLE DATE: 05/14/99

SAMPLE KEY

SAMPLE NUMBER: M99-0027 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: ACW#13
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:43 SAMPLE DATE: 05/14/99

SAMPLE KEY

SAMPLE NUMBER: M99-0028 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: EMP #3 after purging
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:05 SAMPLE DATE: 05/14/99

SAMPLE KEY

SAMPLE NUMBER: M99-0029 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Bailer Blank after sampling
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:10 SAMPLE DATE: 05/14/99

SAMPLE KEY

SAMPLE NUMBER: M99-0030 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Production Well #1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:33 SAMPLE DATE: 05/14/99

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Irvine

Reno Division
1030 Matley Lane • Reno, Nevada 89502
(702) 348-2522 • Fax: (702) 348-2546
1-800-368-5221

CLIENT: El Paso Natural Gas Co.
8645 Railroad Dr.
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME:
PROJECT #:

NEL ORDER ID: P9905043

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 5/14/99.

Samples were analyzed as received.

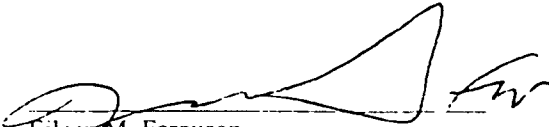
Where applicable we have included the following quality control data:

Method blank - used to demonstrate absence of contamination or interferences in the analytical process.

Laboratory Control Spike (LCS) - used to demonstrate laboratory ability to perform the method within specifications by spiking representative analytes into a clean matrix.

Surrogates - compounds added to each sample to ensure that the method requirements are met for each individual sample.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Eileen M. Ferguson
Laboratory Manager

5/25/99
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0001
DATE SAMPLED: 5/10/99
NEL SAMPLE ID: P9905043-01

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> LIMIT	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	ND	0.01 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Silica	ND	0.2 mg/L	1	SM 4500Si-D	NA	5/18/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	5/17/99	5/18/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0002
DATE SAMPLED: 5/10/99
NEL SAMPLE ID: P9905043-02

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	ND	0.01 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Silica	ND	0.2 mg/L	1	SM 4500Si-D	NA	5/18/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	5/17/99	5/18/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0003
DATE SAMPLED: 5/10/99
NEL SAMPLE ID: P9905043-03

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JF - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	0.22	0.01 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Calcium	50	0.25 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Iron	0.45	0.05 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Magnesium	14	0.25 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Manganese	0.040	0.0025 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Potassium	4.3	1. mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Silica	22	0.4 mg/L	2	SM 4500Si-D	NA	5/18/99
Sodium	170	0.25 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Zinc	0.15	0.05 mg/L	0.5	EPA 200.7	5/17/99	5/18/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P05043-Si-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	0.2 mg/L	1	SM 4500Si-D	NA	5/18/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P05043i-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	ND	0.01 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	5/17/99	5/18/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	5/17/99	5/18/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0001
DATE SAMPLED: 5/10/99
NEL SAMPLE ID: P9905043-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		METHOD	UNITS	ANALYZED
		LIMIT	D. F.			
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity, Total	ND	25.	1	SM 2320 B	mg/L	5/19/99
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/19/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/19/99
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	5/20/99
Hardness, Total (as CaCO3)	ND	1.	0.5	EPA 200.7	mg/L	5/18/99
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	5/17/99
pH	6.18	2.	1	EPA 150.1	pH Units	5/14/99
pH Temperature	21.5	1.	1	EPA 150.1	°C	5/14/99
Specific Conductance	1.32	1.	1	SM 2510 B	µS/cm	5/14/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	5/19/99
Total Dissolved Solids	41	25.	1	SM 2540 C	mg/L	5/14/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M199-0002
DATE SAMPLED: 5/10/99
NEL SAMPLE ID: P9905043-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	5/19/99	
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	5/19/99	
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	5/19/99	
Alkalinity, Total	ND	25.	1	SM 2320 B	mg/L	5/19/99	
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/19/99	
Chloride	0.1	0.1	1	EPA 300.0	mg/L	5/19/99	
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	5/20/99	
Hardness, Total (as CaCO3)	ND	1.	0.5	EPA 200.7	mg/L	5/18/99	
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	5/17/99	
pH	5.86	2.	1	EPA 150.1	pH Units	5/14/99	
pH Temperature	22.7	1.	1	EPA 150.1	°C	5/14/99	
Specific Conductance	1.63	1.	1	SM 2510 B	µS/cm	5/14/99	
Sulfate	0.1	0.1	1	EPA 300.0	mg/L	5/19/99	
Total Dissolved Solids	32	25.	1	SM 2540 C	mg/L	5/14/99	

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0003
DATE SAMPLED: 5/10/99
NEL SAMPLE ID: P9905043-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	REPORTING			METHOD	UNITS	ANALYZED
	RESULT	LIMIT	D. F.			
Alkalinity - Bicarbonate	160		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity, Total	160	25.	1	SM 2320 B	mg/L	5/19/99
Bromide	0.6	0.2	1	EPA 300.0	mg/L	5/19/99
Chloride	210	10.	100	EPA 300.0	mg/L	5/19/99
Fluoride	1.5	0.4	1	SM 4500-F C	mg/L	5/20/99
Hardness, Total (as CaCO ₃)	180	1.	0.5	EPA 200.7	mg/L	5/18/99
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO ₃ F	mg/L-N	5/17/99
pH	7.86	2.	1	EPA 150.1	pH Units	5/14/99
pH Temperature	22.3	1.	1	EPA 150.1	°C	5/14/99
Specific Conductance	1120	1.	1	SM 2510 B	µS/cm	5/14/99
Sulfate	51	10.	100	EPA 300.0	mg/L	5/19/99
Total Dissolved Solids	646	25.	1	SM 2540 C	mg/L	5/14/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990514TDSAQ-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	25.	1	SM 2540 C	mg/L	5/14/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990517NO2NO3-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990519ALK-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity, Total	ND	25.	1	SM 2320 B	mg/L	5/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990519ICAQ-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/19/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/19/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	5/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990520FAQ-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	5/20/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0001
DATE SAMPLED: 5/10/99
NEL SAMPLE ID: P9905043-01

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/19/99
ANALYZED: 5/19/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	93	86 - 115
Toluene-d8	99	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0002
DATE SAMPLED: 5/10/99
NEL SAMPLE ID: P9905043-02

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/19/99
ANALYZED: 5/19/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	99	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0003
DATE SAMPLED: 5/10/99
NEL SAMPLE ID: P9905043-03

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/19/99
ANALYZED: 5/19/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	96	86 - 115
Toluene-d8	101	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990519BTEX-BLK

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/19/99
ANALYZED: 5/19/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	96	86 - 115
Toluene-d8	99	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	990514COND2-LCS	1412	1440	102	95 - 105	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	990514PHAQ-LCS	7	7.017	100	99 - 101	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	990514TDSAQ-LCS	1000	992	99	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	990517NO2NO3-LCS	0.5	0.5228	105	90 - 110	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	990519ALK-LCS	125	122.4	98	85 - 115	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990519ICAQ-LCS	100	104	104	90 - 110	
Chloride	P9905043-03-MS	100	317	107	80 - 120	
Bromide	990519ICAQ-LCS	100	100	100	90 - 110	
Bromide	P9905043-03-MS	100	104.6	104	80 - 120	
Sulfate	990519ICAQ-LCS	100	105	105	90 - 110	
Sulfate	P9905043-03-MS	100	155	104	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	990520FAQ-LCS	1	1.09	109	85 - 115	
Fluoride	P9905043-01-MS	1	0.955	96	80 - 120	
Fluoride	P9905043-01-MSD	1	1.08	108	80 - 120	12.3

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Silica	P05043-Si-LCS	10	10.6	106	85 - 115	
Silica	P9905043-01-MS	5	4.57	91	75 - 125	
Silica	P9905043-01-MSD	5	4.76	95	75 - 125	4.1

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Boron	P05043i-LCS	1	1.05	105	85 - 115	
Boron	P9905043-01-MS	1	1.06	106	75 - 125	
Boron	P9905043-01-MSD	1	1.05	105	75 - 125	0.9
Calcium	P05043i-LCS	20	20.8	104	85 - 115	
Calcium	P9905043-01-MS	20	21.5	108	75 - 125	
Calcium	P9905043-01-MSD	20	21.2	106	75 - 125	1.4
Copper	P05043i-LCS	0.5	0.492	98	85 - 115	
Copper	P9905043-01-MS	0.5	0.508	102	75 - 125	
Copper	P9905043-01-MSD	0.5	0.501	100	75 - 125	1.4
Iron	P05043i-LCS	1	1.03	103	85 - 115	
Iron	P9905043-01-MS	1	1.14	114	75 - 125	
Iron	P9905043-01-MSD	1	1.06	106	75 - 125	7.3
Magnesium	P05043i-LCS	20	20.5	103	85 - 115	
Magnesium	P9905043-01-MS	20	21.1	106	75 - 125	
Magnesium	P9905043-01-MSD	20	20.8	104	75 - 125	1.4
Manganese	P05043i-LCS	0.5	0.517	103	85 - 115	
Manganese	P9905043-01-MS	0.5	0.535	107	75 - 125	
Manganese	P9905043-01-MSD	0.5	0.527	105	75 - 125	1.5
Potassium	P05043i-LCS	20	20.2	101	85 - 115	
Potassium	P9905043-01-MS	20	20.9	105	75 - 125	
Potassium	P9905043-01-MSD	20	20.5	103	75 - 125	1.9
Sodium	P05043i-LCS	20	20.1	101	85 - 115	
Sodium	P9905043-01-MS	20	20.9	105	75 - 125	
Sodium	P9905043-01-MSD	20	20.5	103	75 - 125	1.9
Zinc	P05043i-LCS	0.5	0.542	108	85 - 115	
Zinc	P9905043-01-MS	0.5	0.57	114	75 - 125	
Zinc	P9905043-01-MSD	0.5	0.556	111	75 - 125	2.5

ND - Not Detected

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CHAIN OF CUSTODY RECORD

Kevin L. Fitch
5/21

Page _____ of _____

PROJECT NUMBER		PROJECT NAME		DATE		SAMPLERS (Signature)	
LAB ID		DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	COMPOSITE OR GRAB
51069	1555	4/20	11:00	H2O	199-0001	5	X
51069	1600	4/20	11:00	H2O	199-0002	5	X
51069	1603	4/20	11:00	H2O	199-0003	5	X
PH, P-T, ALK, CI, Sulfide, Hydrogen, CO, NOx, H2S, Silica, F, K, Bromide, Nitrate, TDS, BTEX, Sp. Conductivity							
REMARKS: 19905043-01							
PH out							
5/11/2000							
LABORATORY SERVICES EL PASO NATURAL GAS COMPANY 8645 RAILROAD DRIVE EL PASO, TEXAS 79904 915-759-2229 FAX: 915-759-2335							

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Irvine

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: NA
PROJECT NUMBER: NA

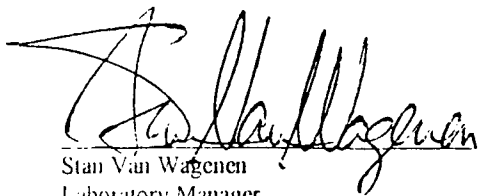
NEL ORDER ID: P9905044

Attached are the analytical results for samples in support of the above referenced project.

Samples were received by NEL in good condition, under chain of custody on 5/14/99.

Samples were analyzed as received.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stan Van Wagenen
Laboratory Manager

5/20/99
Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>		<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0583	Idaho	Certified	Certified	
California	1707	2002	2264	Montana	Certified	Certified	
US Army Corps of Engineers	Certified	Certified	Certified	Nevada	NV033	NV052	CA084
				L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0004
DATE SAMPLED: 5/11/99
NEL SAMPLE ID: P9905044-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	5500	250.	2500	EPA 300.0	mg/L	5/19/99
Specific Conductance	14700	1.	1	SM 2510 B	μS/cm	5/14/99
Total Dissolved Solids	8450	250.	10	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0005
DATE SAMPLED: 5/11/99
NEL SAMPLE ID: P9905044-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	5400	200.	2000	EPA 300.0	mg/L	5/19/99
Specific Conductance	16900	1.	1	SM 2510 B	µS/cm	5/14/99
Total Dissolved Solids	8500	250.	10	SM 2540 C	mg/L	5/17/99

D F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0006
DATE SAMPLED: 5/11/99
NEL SAMPLE ID: P9905044-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>	<u>D. F.</u>			
Chloride	500	25.	250	EPA 300.0	mg/L	5/19/99
Specific Conductance	2490	1.	1	SM 2510 B	μS/cm	5/14/99
Total Dissolved Solids	1370	250.	10	SM 2540 C	mg/L	5/17/99

D.F - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0007
DATE SAMPLED: 5/11/99
NEL SAMPLE ID: P9905044-04

TEST: **Inorganic Non-Metals**
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>	<u>D. F.</u>			
Chloride	610	25.	250	EPA 300.0	mg/L	5/19/99
Specific Conductance	2480	1.	1	SM 2510 B	μS/cm	5/14/99
Total Dissolved Solids	1380	50.	2	SM 2540 C	mg/L	5/17/99

D.F - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0008
DATE SAMPLED: 5/11/99
NEL SAMPLE ID: P9905044-05

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>					
Chloride	330	25.		250	EPA 300.0	mg/L	5/19/99
Specific Conductance	2250	1.		1	SM 2510 B	μS/cm	5/14/99
Total Dissolved Solids	1240	50.		2	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0009
DATE SAMPLED: 5/11/99
NEL SAMPLE ID: P9905044-06

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	18000	500.	5000	EPA 300.0	mg/L	5/19/99
Specific Conductance	49100	1.	1	SM 2510 B	μS/cm	5/14/99
Total Dissolved Solids	31200	2500.	100	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0010
DATE SAMPLED: 5/11/99
NEL SAMPLE ID: P9905044-07

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		METHOD	UNITS	ANALYZED
		LIMIT	D. F.			
Chloride	21000	500.	5000	EPA 300.0	mg/L	5/19/99
Specific Conductance	52500	1.	1	SM 2510 B	μS/cm	5/14/99
Total Dissolved Solids	29800	2500.	100	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0011
DATE SAMPLED: 5/12/99
NEL SAMPLE ID: P9905044-08

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		METHOD	UNITS	ANALYZED
		LIMIT	D. F.			
Chloride	6600	250.	2500	EPA 300.0	mg/L	5/19/99
Specific Conductance	19600	1.	1	SM 2510 B	μS/cm	5/14/99
Total Dissolved Solids	10100	500.	20	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0012
DATE SAMPLED: 5/12/99
NEL SAMPLE ID: P9905044-09

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>	<u>D. F.</u>			
Chloride	45000	2500.	25000	EPA 300.0	mg/L	5/19/99
Specific Conductance	131000	1.	1	SM 2510 B	μS/cm	5/14/99
Total Dissolved Solids	84800	2500.	100	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0013
DATE SAMPLED: 5/12/99
NEL SAMPLE ID: P9905044-10

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	7400	250.	2500	EPA 300.0	mg/L	5/19/99
Specific Conductance	24400	1.	1	SM 2510 B	μS/cm	5/14/99
Total Dissolved Solids	12000	500.	20	SM 2540 C	mg/L	5/17/99

D F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0014
DATE SAMPLED: 5/12/99
NEL SAMPLE ID: P9905044-11

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>	<u>D. F.</u>			
Chloride	7200	200.	2000	EPA 300.0	mg/L	5/19/99
Specific Conductance	19800	1.	1	SM 2510 B	μS/cm	5/14/99
Total Dissolved Solids	11100	500.	20	SM 2540 C	mg/L	5/17/99

D F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0015
DATE SAMPLED: 5/12/99
NEL SAMPLE ID: P9905044-12

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>	<u>D. F.</u>			
Chloride	73	10.	100	EPA 300.0	mg/L	5/19/99
Specific Conductance	609	1.	1	SM 2510 B	µS/cm	5/14/99
Total Dissolved Solids	379	25.	1	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0016
DATE SAMPLED: 5/12/99
NEL SAMPLE ID: P9905044-13

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>	<u>D. F.</u>			
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/19/99
Specific Conductance	1.21	1.	1	SM 2510 B	µS/cm	5/14/99
Total Dissolved Solids	ND	25.	1	SM 2540 C	mg/L	5/17/99

D.F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: NA
 PROJECT #: NA

CLIENT ID: M99-0017
 DATE SAMPLED: 5/12/99
 NEL SAMPLE ID: P9905044-14

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>	<u>D. F.</u>			
Chloride	4900	100.	1000	EPA 300.0	mg/L	5/19/99
Specific Conductance	14300	1.	1	SM 2510 B	μS/cm	5/14/99
Total Dissolved Solids	7420	25.	1	SM 2540 C	mg/L	5/17/99

D F - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990517TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	25	1	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990519ICAQ-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/19/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/19/99
Nitrite, as N	ND	0.1	1	EPA 300.0	mg/L-N	5/19/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	5/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990519ICAQ2-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/19/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	990514COND-LCS	1412	1432	101	95 - 105	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	990517TDS-LCS	1000	965	97	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990519ICAQ-LCS	100	104	104	90 - 110	
Chloride	P9905043-03-MS	100	317	107	80 - 120	
Bromide	990519ICAQ-LCS	100	100	100	90 - 110	
Bromide	P9905043-03-MS	100	104.6	104	80 - 120	
Sulfate	990519ICAQ-LCS	100	105	105	90 - 110	
Sulfate	P9905043-03-MS	100	155	104	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990519ICAQ2-LCS	100	104	104	90 - 110	
Chloride	P9905044-12-MS	100	169	96	80 - 120	

ND - Not Detected

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CHAIN OF CUSTODY RECORD

PROJECT NUMBER				PROJECT NAME				CONTRACT LABORATORY			
SAMPLES (Continued)				DATE				REQUESTED ANALYSIS			
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBERS OF CONTAINERS	COMPOSITE OR GRAB	REQUESTED ANALYSIS			REMARKS	
51289	12/17	1347	H ₂ O	199-0016	1						1995044-13 4 - 14
51289	12/16	1536	H ₂ O	199-0017	1						
RECEIVED BY: (Signature) RECEIVED BY: (Signature) DATE/TIME 5/13/99 0700 DATE/TIME 5/14/1200 RECEIVED BY: (Signature) RECEIVED BY: (Signature)											
REQUESTED TURNAROUND TIME: ☒ ROUTINE ☐ RUSH											LABORATORY SERVICES EL PASO NATURAL GAS COMPANY 8645 RAILROAD DRIVE EL PASO, TEXAS 79904 915-759-2229 FAX: 915-759-2335

LABORATORY SERVICES
EL PASO NATURAL GAS COMPANY
8645 RAILROAD DRIVE
EL PASO, TEXAS 79904

915-759-2229 FAX: 915-759-2335

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Irvine

Reno Division
1030 Matley Lane • Reno, Nevada 89502
(702) 348-2522 • Fax: (702) 348-2546
1-800-368-5221

CLIENT: El Paso Natural Gas Co.
8645 Railroad Dr.
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME:
PROJECT #:

NEL ORDER ID: P9905049

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 5/14/99.

Samples were analyzed as received.

Where applicable we have included the following quality control data:

Method blank - used to demonstrate absence of contamination or interferences in the analytical process.
Laboratory Control Spike (LCS) - used to demonstrate laboratory ability to perform the method within specifications by spiking representative analytes into a clean matrix.
Surrogates - compounds added to each sample to ensure that the method requirements are met for each individual sample.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

The end of run CCV for pH failed QC limits by 0.02 pH units. Since the samples were received outside hold time, this error is not significant, and the samples were not reanalyzed.

Some results have been flagged as follows:

Hr - Sample received beyond holding time for this parameter.

Eileen M. Ferguson
Eileen M. Ferguson
Laboratory Manager

5/17/99
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0018
DATE SAMPLED: 5/13/99
NEL SAMPLE ID: P9905049-01

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	0.24	0.01 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Calcium	51	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Iron	0.14	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Magnesium	17	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Manganese	0.039	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Potassium	4.0	1. mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Silica	33	0.8 mg/L	4	SM 4500Si-D	NA	5/18/99
Sodium	72	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Zinc	0.089	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0025
DATE SAMPLED: 5/13/99
NEL SAMPLE ID: P9905049-02

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	0.20	0.01 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Calcium	74	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Iron	0.74	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Magnesium	22	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Manganese	0.015	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Potassium	5.1	1. mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Silica	32	0.8 mg/L	4	SM 4500Si-D	NA	5/18/99
Sodium	71	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Zinc	0.28	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99

D F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P05043-Si-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	0.2 mg/L	1	SM 4500Si-D	NA	5/18/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P05050i-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	ND	0.01 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0018
DATE SAMPLED: 5/13/99
NEL SAMPLE ID: P9905049-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
			LIMIT				
Alkalinity - Bicarbonate	180			1	SM 2320 B	mg/L	5/19/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	5/19/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	5/19/99
Alkalinity, Total	180		25.	1	SM 2320 B	mg/L	5/19/99
Bromide	0.4		0.2	1	EPA 300.0	mg/L	5/20/99
Chloride	34		5.	50	EPA 300.0	mg/L	5/20/99
Fluoride	0.84		0.4	1	SM 4500-F C	mg/L	5/20/99
Hardness, Total (as CaCO3)	200		1.	0.5	EPA 200.7	mg/L	5/19/99
Nitrate/Nitrite as N, Total	0.62		0.05	1	SM 4500-NO3 F	mg/L-N	5/21/99
pH	7.76	Hr	2.	1	EPA 150.1	pH Units	5/17/99
pH Temperature	23.6	Hr	1.	1	EPA 150.1	°C	5/17/99
Specific Conductance	630		1.	1	SM 2510 B	µS/cm	5/20/99
Sulfate	80		5.	50	EPA 300.0	mg/L	5/20/99
Total Dissolved Solids	381		25.	1	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0025
DATE SAMPLED: 5/13/99
NEL SAMPLE ID: P9905049-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING			METHOD	UNITS	ANALYZED
		LIMIT	D. F.				
Alkalinity - Bicarbonate	150		1		SM 2320 B	mg/L	5/19/99
Alkalinity - Carbonate	ND		1		SM 2320 B	mg/L	5/19/99
Alkalinity - Hydroxide	ND		1		SM 2320 B	mg/L	5/19/99
Alkalinity, Total	150	25.	1		SM 2320 B	mg/L	5/19/99
Bromide	0.6	0.2	1		EPA 300.0	mg/L	5/20/99
Chloride	120	5.	50		EPA 300.0	mg/L	5/20/99
Fluoride	0.96	0.4	1		SM 4500-F C	mg/L	5/20/99
Hardness, Total (as CaCO3)	280	1.	0.5		EPA 200.7	mg/L	5/19/99
Nitrate/Nitrite as N, Total	0.27	0.05	1		SM 4500-NO3 F	mg/L-N	5/21/99
pH	7.91	Hr 2.	1		EPA 150.1	pH Units	5/17/99
pH Temperature	23.6	Hr 1.	1		EPA 150.1	°C	5/17/99
Specific Conductance	808	1.	1		SM 2510 B	µS/cm	5/20/99
Sulfate	59	5.	50		EPA 300.0	mg/L	5/20/99
Total Dissolved Solids	468	25.	1		SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990517TDSB-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	25.	1	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990519ALK-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity, Total	ND	25.	1	SM 2320 B	mg/L	5/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990520FAQ-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	5/20/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 9905201CAQ-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/20/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/20/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	5/20/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990520ICAQ2-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/20/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/20/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	5/20/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990521NO2NO3-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	5/21/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:

CLIENT ID: M99-0018
 DATE SAMPLED: 5/13/99
 NEL SAMPLE ID: P9905049-01

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
 DILUTION: 1

ANALYST: SEJ - Las Vegas Division
 EXTRACTED: 5/19/99
 ANALYZED: 5/19/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	99	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:

CLIENT ID: M99-0025
 DATE SAMPLED: 5/13/99
 NEL SAMPLE ID: P9905049-02

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
 DILUTION: 1

ANALYST: SEJ - Las Vegas Division
 EXTRACTED: 5/19/99
 ANALYZED: 5/19/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	100	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990519BTEX-BLK

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/19/99
ANALYZED: 5/19/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	96	86 - 115
Toluene-d8	99	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	990517PHAQ-LCS	7	7.042	101	99 - 101	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	990517TDSB-LCS	1000	959	96	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	990519ALK-LCS	125	122.4	98	85 - 115	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	990520CONDAQ-LCS	1412	1429	101	95 - 105	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	990520FAQ-LCS	1	1.09	109	85 - 115	
Fluoride	P9905043-01-MS	1	0.955	96	80 - 120	
Fluoride	P9905043-01-MSD	1	1.08	108	80 - 120	12.3

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990520ICAQ-LCS	100	106	106	90 - 110	
Chloride	L9905169-01-MS	100	101	101	80 - 120	
Bromide	990520ICAQ-LCS	100	101	101	90 - 110	
Bromide	L9905169-01-MS	100	106	106	80 - 120	
Sulfate	990520ICAQ-LCS	100	99	99	90 - 110	
Sulfate	L9905169-01-MS	100	89	89	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990520ICAQ2-LCS	100	106	106	90 - 110	
Chloride	P9905049-02-MS	100	220	100	80 - 120	
Bromide	990520ICAQ2-LCS	100	101	101	90 - 110	
Bromide	P9905049-02-MS	100	104.6	104	80 - 120	
Sulfate	990520ICAQ2-LCS	100	99	99	90 - 110	
Sulfate	P9905049-02-MS	100	145	86	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	990521NO2NO3-LCS	0.5	0.51	102	90 - 110	
Nitrate/Nitrite as N, Total	L9905107-18-MS	1	1.291	97	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Silica	P05043-Si-LCS	10	10.6	106	85 - 115	
Silica	P9905043-01-MS	5	4.57	91	75 - 125	
Silica	P9905043-01-MSD	5	4.76	95	75 - 125	4.1

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Boron	P05050i-LCS	1	1.1	110	85 - 115	
Boron	P9905050-01-MS	1	1.35	108	75 - 125	
Boron	P9905050-01-MSD	1	1.33	106	75 - 125	1.9
Calcium	P05050i-LCS	20	21.3	107	85 - 115	
Calcium	P9905050-01-MS	20	69.5	103	75 - 125	
Calcium	P9905050-01-MSD	20	70.8	109	75 - 125	6.1
Copper	P05050i-LCS	0.5	0.514	103	85 - 115	
Copper	P9905050-01-MS	0.5	0.538	104	75 - 125	
Copper	P9905050-01-MSD	0.5	0.531	103	75 - 125	1.4
Iron	P05050i-LCS	1	1.04	104	85 - 115	
Iron	P9905050-01-MS	1	1.22	105	75 - 125	
Iron	P9905050-01-MSD	1	1.22	105	75 - 125	0.
Magnesium	P05050i-LCS	20	21	105	85 - 115	
Magnesium	P9905050-01-MS	20	39.3	107	75 - 125	
Magnesium	P9905050-01-MSD	20	39.5	108	75 - 125	0.9
Manganese	P05050i-LCS	0.5	0.534	107	85 - 115	
Manganese	P9905050-01-MS	0.5	0.552	108	75 - 125	
Manganese	P9905050-01-MSD	0.5	0.543	106	75 - 125	1.7
Potassium	P05050i-LCS	20	21.4	107	85 - 115	
Potassium	P9905050-01-MS	20	27.4	109	75 - 125	
Potassium	P9905050-01-MSD	20	27.4	109	75 - 125	0.
Sodium	P05050i-LCS	20	21.2	106	85 - 115	
Sodium	P9905050-01-MS	20	115	100	75 - 125	
Sodium	P9905050-01-MSD	20	118	115	75 - 125	14.
Zinc	P05050i-LCS	0.5	0.548	110	85 - 115	
Zinc	P9905050-01-MS	0.5	0.563	113	75 - 125	
Zinc	P9905050-01-MSD	0.5	0.546	109	75 - 125	3.1

ND - Not Detected

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CHAIN OF CUSTODY RECORD

Page 1

5/24

Atty's Lead & Urth
P9905049 Rem Lead

PROJECT NUMBER		PROJECT NAME		DATE:		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS		CONTRACT LABORATORY						
SAMPLER(S) SIGNATURE		DATE		SAMPLE NUMBER		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS		CONTRACT LABORATORY						
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	COMPOSITE OR GRAB	REQUESTED ANALYSIS	REMARKS										
51359	0815	1400	H2O	199-0018	5	SP. 7/8	PH, P-T ALK, CI, Sulfate, Hardness, Ca, Mg, Na, Silica, F, K, Barium, Nitrate, TDS, BTEX, SP. Conductance	(SEE ATTACHED)										
51359	1013	1400	H2O	199-0025	5	X	X	X	X	X	X	X	(" ") - (02)					
9/10/99 tap 1000' 45C Chain of Custody																		
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)						
51359		5/16/99 1735		Steven Brown		5/16/99 1030		Fedex		5/16/99 1030		RECEIVED OF LABORATORY (Signature)						
REQUESTED TURNAROUND TIME:				ROUTINE ☐ RUSH ☐				SAMPLE RECEIPT REMARKS				RESULTS & INVOICES TO:						
CARRIER CO.				CHARGE CODE				TECHNICAL SERVICES DIVISION LABORATORY EL PASO NATURAL GAS COMPANY 8645 RAIL ROAD DRIVE EL PASO, TEXAS 79904 915-759-2229 FAX: 915-759-2335										

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Irvine

Reno Division
1030 Matley Lane • Reno, Nevada 89502
(702) 348-2522 • Fax: (702) 348-2546
1-800-368-5221

CLIENT: El Paso Natural Gas Co.
8645 Railroad Dr.
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME:
PROJECT #:

NEL ORDER ID: P9905050

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 5/15/99.

Samples were analyzed as received.

Where applicable we have included the following quality control data:

Method blank - used to demonstrate absence of contamination or interferences in the analytical process.
Laboratory Control Spike (LCS) - used to demonstrate laboratory ability to perform the method within specifications by spiking representative analytes into a clean matrix.
Surrogates - compounds added to each sample to ensure that the method requirements are met for each individual sample.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

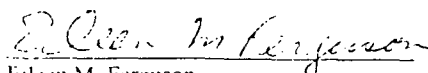
The end of run CCV for pH failed QC limits by 0.02 pH units. Since the samples were received outside hold time, this error is not significant.

Some results have been flagged as follows:

Hr - Sample received beyond holding time for this parameter.

Some QA results have been flagged as follows:

Jl - The batch MS and/or MSD were outside acceptance limits. The LCS was acceptable.


Eileen M. Ferguson
Laboratory Manager

5/16/99
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0021
DATE SAMPLED: 5/13/99
NEL SAMPLE ID: P9905050-01

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	0.27	0.01 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Calcium	49	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Copper	0.016	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Iron	0.17	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Magnesium	18	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Manganese	0.011	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Potassium	5.7	1. mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Silica	28	0.8 mg/L	4	SM 4500Si-D	NA	5/18/99
Sodium	95	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0024
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-02

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	0.28	0.01 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Calcium	210	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Copper	0.0063	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Iron	0.16	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Magnesium	74	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Manganese	0.026	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Potassium	9.5	1. mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Silica	23	0.8 mg/L	4	SM 4500Si-D	NA	5/18/99
Sodium	150	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:

CLIENT ID: M99-0026
 DATE SAMPLED: 5/14/99
 NEL SAMPLE ID: P9905050-03

TEST: AZ METALS PKG
 MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	0.26	0.01 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Calcium	210	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Copper	0.0044	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Iron	0.16	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Magnesium	73	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Manganese	0.025	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Potassium	9.0	1. mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Silica	26	0.8 mg/L	4	SM 4500Si-D	NA	5/18/99
Sodium	140	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:

CLIENT ID: M99-0027
 DATE SAMPLED: 5/14/99
 NEL SAMPLE ID: P9905050-04

TEST: AZ METALS PKG
 MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	0.25	0.01 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Calcium	46	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Copper	0.0062	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Iron	0.17	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Magnesium	15	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Manganese	0.0084	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Potassium	5.3	1. mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Silica	28	0.8 mg/L	4	SM 4500Si-D	NA	5/18/99
Sodium	86	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99

D.F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0028
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-05

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	0.21	0.01 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Calcium	44	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Copper	0.0060	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Iron	0.76	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Magnesium	11	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Manganese	0.054	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Potassium	4.2	1. mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Silica	19	0.8 mg/L	4	SM 4500Si-D	NA	5/18/99
Sodium	65	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:

CLIENT ID: M99-0029
 DATE SAMPLED: 5/14/99
 NEL SAMPLE ID: P9905050-06

TEST: AZ METALS PKG
 MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	ND	0.01 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Silica	ND	0.2 mg/L	1	SM 4500Si-D	NA	5/18/99
Sodium	0.41	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P05050-Si-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	0.2 mg/L	1	SM 4500Si-D	NA	5/18/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P05050i-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Boron	ND	0.01 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	5/18/99	5/19/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	5/18/99	5/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0021
DATE SAMPLED: 5/13/99
NEL SAMPLE ID: P9905050-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
			LIMIT				
Alkalinity - Bicarbonate	170			1	SM 2320 B	mg/L	5/19/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	5/19/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	5/19/99
Alkalinity, Total	170		25.	1	SM 2320 B	mg/L	5/19/99
Bromide	0.4		0.2	1	EPA 300.0	mg/L	5/21/99
Chloride	62		5.	50	EPA 300.0	mg/L	5/20/99
Fluoride	1.6		0.4	1	SM 4500-F C	mg/L	5/20/99
Hardness, Total (as CaCO3)	200		1.	0.5	EPA 200.7	mg/L	5/19/99
Nitrate/Nitrite as N, Total	2.0		0.5	10	SM 4500-NO3 F	mg/L-N	5/21/99
pH	7.89	Hr	2.	1	EPA 150.1	pH Units	5/17/99
pH Temperature	23.5	Hr	1.	1	EPA 150.1	°C	5/17/99
Specific Conductance	764		1.	1	SM 2510 B	µS/cm	5/20/99
Sulfate	100		5.	50	EPA 300.0	mg/L	5/20/99
Total Dissolved Solids	500		25.	1	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

CLIENT ID: M99-0024
 DATE SAMPLED: 5/14/99
 NEL SAMPLE ID: P9905050-02

PARAMETER	RESULT	REPORTING LIMIT	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate	150		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity, Total	150	25.	1	SM 2320 B	mg/L	5/19/99
Bromide	ND	2.	10	EPA 300.0	mg/L	5/21/99
Chloride	500	20.	200	EPA 300.0	mg/L	5/21/99
Fluoride	0.86	0.4	1	SM 4500-F C	mg/L	5/20/99
Hardness, Total (as CaCO3)	840	1.	0.5	EPA 200.7	mg/L	5/19/99
Nitrate/Nitrite as N, Total	0.14	0.05	1	SM 4500-NO3 F	mg/L-N	5/21/99
pH	7.47 Hr	2.	1	EPA 150.1	pH Units	5/17/99
pH Temperature	23.8 Hr	1.	1	EPA 150.1	°C	5/17/99
Specific Conductance	2390	1.	1	SM 2510 B	µS/cm	5/20/99
Sulfate	120	20.	200	EPA 300.0	mg/L	5/21/99
Total Dissolved Solids	1440	50.	2	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0026
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING			METHOD	UNITS	ANALYZED
		LIMIT	D. F.				
Alkalinity - Bicarbonate	150		1	SM 2320 B	mg/L	5/19/99	
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	5/19/99	
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	5/19/99	
Alkalinity, Total	150	25.	1	SM 2320 B	mg/L	5/19/99	
Bromide	ND	2.	10	EPA 300.0	mg/L	5/21/99	
Chloride	590	20.	200	EPA 300.0	mg/L	5/21/99	
Fluoride	0.86	0.4	1	SM 4500-F C	mg/L	5/20/99	
Hardness, Total (as CaCO3)	810	1.	0.5	EPA 200.7	mg/L	5/19/99	
Nitrate/Nitrite as N, Total	0.18	0.05	1	SM 4500-NO3 F	mg/L-N	5/21/99	
pH	7.42	Hr	1	EPA 150.1	pH Units	5/17/99	
pH Temperature	23.9	Hr	1	EPA 150.1	°C	5/17/99	
Specific Conductance	2350	1.	1	SM 2510 B	µS/cm	5/20/99	
Sulfate	150	20.	200	EPA 300.0	mg/L	5/21/99	
Total Dissolved Solids	1410	50.	2	SM 2540 C	mg/L	5/17/99	

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0027
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-04

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	REPORTING		D. F.	METHOD	UNITS	ANALYZED
	RESULT	LIMIT				
Alkalinity - Bicarbonate	170		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity, Total	170	25.	1	SM 2320 B	mg/L	5/19/99
Bromide	0.4	0.2	1	EPA 300.0	mg/L	5/21/99
Chloride	45	5.	50	EPA 300.0	mg/L	5/20/99
Fluoride	1.3	0.4	1	SM 4500-F C	mg/L	5/20/99
Hardness, Total (as CaCO ₃)	180	1.	0.5	EPA 200.7	mg/L	5/19/99
Nitrate/Nitrite as N, Total	1.4	0.5	10	SM 4500-NO ₃ F	mg/L-N	5/21/99
pH	7.96	Hr 2.	1	EPA 150.1	pH Units	5/17/99
pH Temperature	24.1	Hr 1.	1	EPA 150.1	°C	5/17/99
Specific Conductance	693	1.	1	SM 2510 B	µS/cm	5/20/99
Sulfate	96	5.	50	EPA 300.0	mg/L	5/20/99
Total Dissolved Solids	403	25.	1	SM 2540 C	mg/L	5/17/99

D F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0028
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-05

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
			LIMIT				
Alkalinity - Bicarbonate	150			1	SM 2320 B	mg/L	5/19/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	5/19/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	5/19/99
Alkalinity, Total	150		25.	1	SM 2320 B	mg/L	5/19/99
Bromide	0.5		0.2	1	EPA 300.0	mg/L	5/21/99
Chloride	66		5.	50	EPA 300.0	mg/L	5/20/99
Fluoride	1.8		0.4	1	SM 4500-F C	mg/L	5/20/99
Hardness, Total (as CaCO3)	150		1.	0.5	EPA 200.7	mg/L	5/19/99
Nitrate/Nitrite as N, Total	ND		0.05	1	SM 4500-NO3 F	mg/L-N	5/21/99
pH	8.27	Hr	2.	1	EPA 150.1	pH Units	5/17/99
pH Temperature	24.0	Hr	1.	1	EPA 150.1	°C	5/17/99
Specific Conductance	599		1.	1	SM 2510 B	µS/cm	5/20/99
Sulfate	53		5.	50	EPA 300.0	mg/L	5/20/99
Total Dissolved Solids	356		25.	1	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0029
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-06

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	REPORTING		D. F.	METHOD	UNITS	ANALYZED
	RESULT	LIMIT				
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity, Total	ND	25.	1	SM 2320 B	mg/L	5/19/99
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/21/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/21/99
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	5/20/99
Hardness, Total (as CaCO ₃)	ND	1.	0.5	EPA 200.7	mg/L	5/19/99
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO ₃ F	mg/L-N	5/21/99
pH	5.86 Hr	2.	1	EPA 150.1	pH Units	5/17/99
pH Temperature	24.6 Hr	1.	1	EPA 150.1	°C	5/17/99
Specific Conductance	1.52	1.	1	SM 2510 B	µS/cm	5/20/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	5/21/99
Total Dissolved Solids	ND	25.	1	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990517TDSB-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	25.	1	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990519ALKAQ-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	5/19/99
Alkalinity, Total	ND	25.	1	SM 2320 B	mg/L	5/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990520FAQ-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	5/20/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 9905201CAQ2-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/20/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	5/20/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990521ICAQ-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/21/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990521ICAQ2-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/21/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/21/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	5/21/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990521NO2NO3-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	5/21/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990521NO2NO3B-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	5/21/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0021
DATE SAMPLED: 5/13/99
NEL SAMPLE ID: P9905050-01

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/19/99
ANALYZED: 5/19/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	99	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:

CLIENT ID: M99-0024
 DATE SAMPLED: 5/14/99
 NEL SAMPLE ID: P9905050-02

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
 DILUTION: 1

ANALYST: SEJ - Las Vegas Division
 EXTRACTED: 5/19/99
 ANALYZED: 5/19/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	4 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	95	86 - 115
Toluene-d8	101	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0026
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-03

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/19/99
ANALYZED: 5/19/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	4 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	101	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0027
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-04

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/19/99
ANALYZED: 5/19/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	100	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0028
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-05

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/19/99
ANALYZED: 5/19/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	3 µg/L	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	98	86 - 115
Toluene-d8	101	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0029
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-06

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

MATRIX: Aqueous
DILUTION: 1

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/19/99
ANALYZED: 5/19/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	97	86 - 115
Toluene-d8	102	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0021
DATE SAMPLED: 5/13/99
NEL SAMPLE ID: P9905050-01

TEST: Total Purgeable Petroleum Hydrocarbons by EPA 5030A/EPA 8260B, December, 1996
MATRIX: Aqueous
DILUTION: 1

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/18/99
ANALYZED: 5/18/99

PARAMETER	Result	Reporting Limit
Gas Range Organics	ND	0.25 mg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
a,a,a-Trifluorotoluene	114	75 - 125

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0024
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-02

TEST: Total Purgeable Petroleum Hydrocarbons by EPA 5030A/EPA 8260B, December, 1996
MATRIX: Aqueous
DILUTION: 1

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/18/99
ANALYZED: 5/18/99

PARAMETER	Result	Reporting Limit
Gas Range Organics	ND	0.25 mg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
a,a,a-Trifluorotoluene	112	75 - 125

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0026
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-03

TEST: Total Purgeable Petroleum Hydrocarbons by EPA 5030A/EPA 8260B, December, 1996
MATRIX: Aqueous
DILUTION: 1

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/18/99
ANALYZED: 5/18/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Gas Range Organics	ND	0.25 mg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	109	75 - 125

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:

CLIENT ID: M99-0027
 DATE SAMPLED: 5/14/99
 NEL SAMPLE ID: P9905050-04

TEST: Total Purgeable Petroleum Hydrocarbons by EPA 5030A/EPA 8260B, December, 1996
 MATRIX: Aqueous
 DILUTION: 1

ANALYST: SEJ - Las Vegas Division
 EXTRACTED: 5/18/99
 ANALYZED: 5/18/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Gas Range Organics	ND	0.25 mg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	114	75 - 125

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0028
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-05

TEST: Total Purgeable Petroleum Hydrocarbons by EPA 5030A/EPA 8260B, December, 1996
MATRIX: Aqueous
DILUTION: 1

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/18/99
ANALYZED: 5/18/99

PARAMETER	Result	Reporting Limit
Gas Range Organics	ND	0.25 mg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
a,a,a-Trifluorotoluene	103	75 - 125

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0029
DATE SAMPLED: 5/14/99
NEL SAMPLE ID: P9905050-06

TEST: Total Purgeable Petroleum Hydrocarbons by EPA 5030A/EPA 8260B, December, 1996
MATRIX: Aqueous
DILUTION: 1

ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/18/99
ANALYZED: 5/18/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Gas Range Organics	ND	0.25 mg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	100	75 - 125

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990518WGas-BLK

TEST: Total Purgeable Petroleum Hydrocarbons by EPA 5030A/EPA 8260B, December, 1996
MATRIX: Aqueous
ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/18/99
ANALYZED: 5/18/99

PARAMETER	Result	Reporting Limit
Gas Range Organics	ND	0.25 mg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
a,a,a-Trifluorotoluene	93	75 - 125

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990519BTEX-BLK

TEST: Volatile Organic Compounds by EPA 8260B, December 1996
MATRIX: Aqueous
ANALYST: SEJ - Las Vegas Division
EXTRACTED: 5/19/99
ANALYZED: 5/19/99

PARAMETER	Result	Reporting Limit
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	96	86 - 115
Toluene-d8	99	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	990517PHAQ-LCS	7	7.042	101	99 - 101	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	990517TDSB-LCS	1000	959	96	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	990519ALKAQ-LCS	125	118.4	95	85 - 115	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	990520CONDAQ-LCS	1412	1429	101	95 - 105	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	990520FAQ-LCS	1	1.09	109	85 - 115	
Fluoride	P9905043-01-MS	1	0.955	96	80 - 120	
Fluoride	P9905043-01-MSD	1	1.08	108	80 - 120	12.3

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990520ICAQ2-LCS	100	106	106	90 - 110	
Chloride	P9905049-02-MS	100	220	100	80 - 120	
Bromide	990520ICAQ2-LCS	100	101	101	90 - 110	
Bromide	P9905049-02-MS	100	104.6	104	80 - 120	
Sulfate	990520ICAQ2-LCS	100	99	99	90 - 110	
Sulfate	P9905049-02-MS	100	145	86	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Bromide	9905211CAQ-LCS	100	101	101	90 - 110	
Bromide	L9905233-01-MS	100	108	108	80 - 120	
Sulfate	9905211CAQ-LCS	100	102	102	90 - 110	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990521ICAQ2-LCS	100	105	105	90 - 110	
Chloride	L9905190-01-MS	100	122	101	68 - 119	
Bromide	990521ICAQ2-LCS	100	101	101	90 - 110	
Bromide	L9905190-01-MS	100	105	105	80 - 120	
Sulfate	990521ICAQ2-LCS	100	102	102	90 - 110	
Sulfate	L9905190-01-MS	100	206	76 JI	43 - 140	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike</u>	<u>Spike</u>	<u>Percent</u>	<u>Acceptable</u>	<u>RPD</u>
		<u>Amount</u>	<u>Result</u>	<u>Recovery</u>	<u>Range</u>	
Nitrate/Nitrite as N, Total	990521NO2NO3-LCS	0.5	0.51	102	90 - 110	
Nitrate/Nitrite as N, Total	L9905107-18-MS	1	1.291	97	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	990521NO2NO3B-LCS	0.5	0.516	103	90 - 110	
Nitrate/Nitrite as N, Total	L9905107-29-MS	1	1.313	99	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Silica	P05050-Si-LCS	10	10.6	106	85 - 115	
Silica	P9905050-06-MS	5	3.74	75	75 - 125	
Silica	P9905050-06-MSD	5	3.86	77	75 - 125	3.2

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Boron	P05050i-LCS	1	1.1	110	85 - 115	
Boron	P9905050-01-MS	1	1.35	108	75 - 125	
Boron	P9905050-01-MSD	1	1.33	106	75 - 125	1.9
Calcium	P05050i-LCS	20	21.3	107	85 - 115	
Calcium	P9905050-01-MS	20	69.5	103	75 - 125	
Calcium	P9905050-01-MSD	20	70.8	109	75 - 125	6.1
Copper	P05050i-LCS	0.5	0.514	103	85 - 115	
Copper	P9905050-01-MS	0.5	0.538	104	75 - 125	
Copper	P9905050-01-MSD	0.5	0.531	103	75 - 125	1.4
Iron	P05050i-LCS	1	1.04	104	85 - 115	
Iron	P9905050-01-MS	1	1.22	105	75 - 125	
Iron	P9905050-01-MSD	1	1.22	105	75 - 125	0.
Magnesium	P05050i-LCS	20	21	105	85 - 115	
Magnesium	P9905050-01-MS	20	39.3	107	75 - 125	
Magnesium	P9905050-01-MSD	20	39.5	108	75 - 125	0.9
Manganese	P05050i-LCS	0.5	0.534	107	85 - 115	
Manganese	P9905050-01-MS	0.5	0.552	108	75 - 125	
Manganese	P9905050-01-MSD	0.5	0.543	106	75 - 125	1.7
Potassium	P05050i-LCS	20	21.4	107	85 - 115	
Potassium	P9905050-01-MS	20	27.4	109	75 - 125	
Potassium	P9905050-01-MSD	20	27.4	109	75 - 125	0.
Sodium	P05050i-LCS	20	21.2	106	85 - 115	
Sodium	P9905050-01-MS	20	115	100	75 - 125	
Sodium	P9905050-01-MSD	20	118	115	75 - 125	14.
Zinc	P05050i-LCS	0.5	0.548	110	85 - 115	
Zinc	P9905050-01-MS	0.5	0.563	113	75 - 125	
Zinc	P9905050-01-MSD	0.5	0.546	109	75 - 125	3.1

ND - Not Detected

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CHAIN OF CUSTODY RECORD

5/24

Kend Leuci

Page 1

PROJECT NUMBER		PROJECT NAME		DATE		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS		CONTRACT LABORATORY	
SAMPLERS: (Signature)		SAMPLER: (Signature)		DATE		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS		CONTRACT LABORATORY	
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER									
511359	1395	1120	H ₂ O	199-0081	5	5 th	X	X	X	X	X	X	(SEE ATTACHED)
511459	1043	1120	H ₂ O	199-0084	5	X	X	X	X	X	X	X	- (02)
511459	1043	1120	H ₂ O	199-0086	5	X	X	X	X	X	X	X	- (03)
511459	1243	1120	H ₂ O	199-0087	5	X	X	X	X	X	X	X	- (04)
511459	1305	1120	H ₂ O	199-0088	5	X	X	X	X	X	X	X	- (05)
511459	1310	1120	H ₂ O	199-0089	5	X	X	X	X	X	X	X	- (06)
(SEE ATTACHED)													
glass tape													
g/c													
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)			
Steven Leuci		5/15/99 1135		Steven Leuci		Fed Ex		5/15/99 1030					
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)			
REQUESTED TURNAROUND TIME:				SAMPLE RECEIPT REMARKS				RESULTS & INVOICES TO:					
☐ ROUTINE ☐ RUSH								TECHNICAL SERVICES DIVISION LABORATORY EL PASO NATURAL GAS COMPANY 8645 RAILROAD DRIVE EL PASO, TEXAS 79904 915-759-2229 FAX 915-759-2335					
CARRIER CO.				CHARGE CODE									
BILL NO.													

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Irvine

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: NA
PROJECT NUMBER: NA

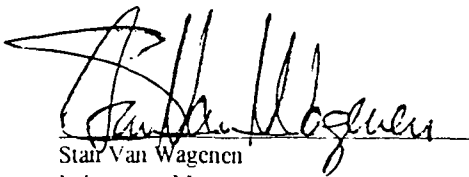
NEL ORDER ID: P9905048

Attached are the analytical results for samples in support of the above referenced project.

Samples were received by NEL in good condition, under chain of custody on 5/15/99.

Samples were analyzed as received.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stair Van Wageningen
Laboratory Manager

5/24/99
Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>		<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0583	Idaho	Certified	Certified	
California	1707	2002	2264	Montana	Certified	Certified	
US Army Corps of Engineers	Certified	Certified	Certified	Nevada	NV033	NV052	CA084
				L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0019
DATE SAMPLED: 5/13/99
NEL SAMPLE ID: P9905048-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	2900	100.	1000	EPA 300.0	mg/L	5/20/99
Specific Conductance	11200	1.	1	SM 2510 B	μS/cm	5/20/99
Total Dissolved Solids	6620	250.	10	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0020
DATE SAMPLED: 5/13/99
NEL SAMPLE ID: P9905048-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>					
Chloride	450	25.		250	EPA 300.0	mg/L	5/20/99
Specific Conductance	3190	1.		1	SM 2510 B	µS/cm	5/20/99
Total Dissolved Solids	1960	50.		2	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0022
DATE SAMPLED: 5/13/99
NEL SAMPLE ID: P9905048-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	3400	100.	1000	EPA 300.0	mg/L	5/20/99
Specific Conductance	11100	1.	1	SM 2510 B	µS/cm	5/20/99
Total Dissolved Solids	6400	250.	10	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0023
DATE SAMPLED: 5/13/99
NEL SAMPLE ID: P9905048-04

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>REPORTING</u>			<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
	<u>RESULT</u>	<u>LIMIT</u>	<u>D. F.</u>			
Chloride	730	25.	250	EPA 300.0	mg/L	5/20/99
Specific Conductance	2810	1.	1	SM 2510 B	µS/cm	5/20/99
Total Dissolved Solids	1660	50.	2	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA

CLIENT ID: M99-0030
DATE SAMPLED: 5/13/99
NEL SAMPLE ID: P9905048-05

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	70	10.	100	EPA 300.0	mg/L	5/20/99
Specific Conductance	846	1.	1	SM 2510 B	μS/cm	5/20/99
Total Dissolved Solids	469	25.	1	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990517TDS-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	25	1	SM 2540 C	mg/L	5/17/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990520ICAQ-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/20/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/20/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	5/20/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	990517TDS-LCS	1000	965	97	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: NA
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	990520CONDAQ-LCS	1412	1429	101	95 - 105	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: NA
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990520ICAQ-LCS	100	106	106	90 - 110	
Chloride	L9905169-01-MS	100	101	101	80 - 120	
Bromide	990520ICAQ-LCS	100	101	101	90 - 110	
Bromide	L9905169-01-MS	100	106	106	80 - 120	
Sulfate	990520ICAQ-LCS	100	99	99	90 - 110	
Sulfate	L9905169-01-MS	100	89	89	80 - 120	

ND - Not Detected

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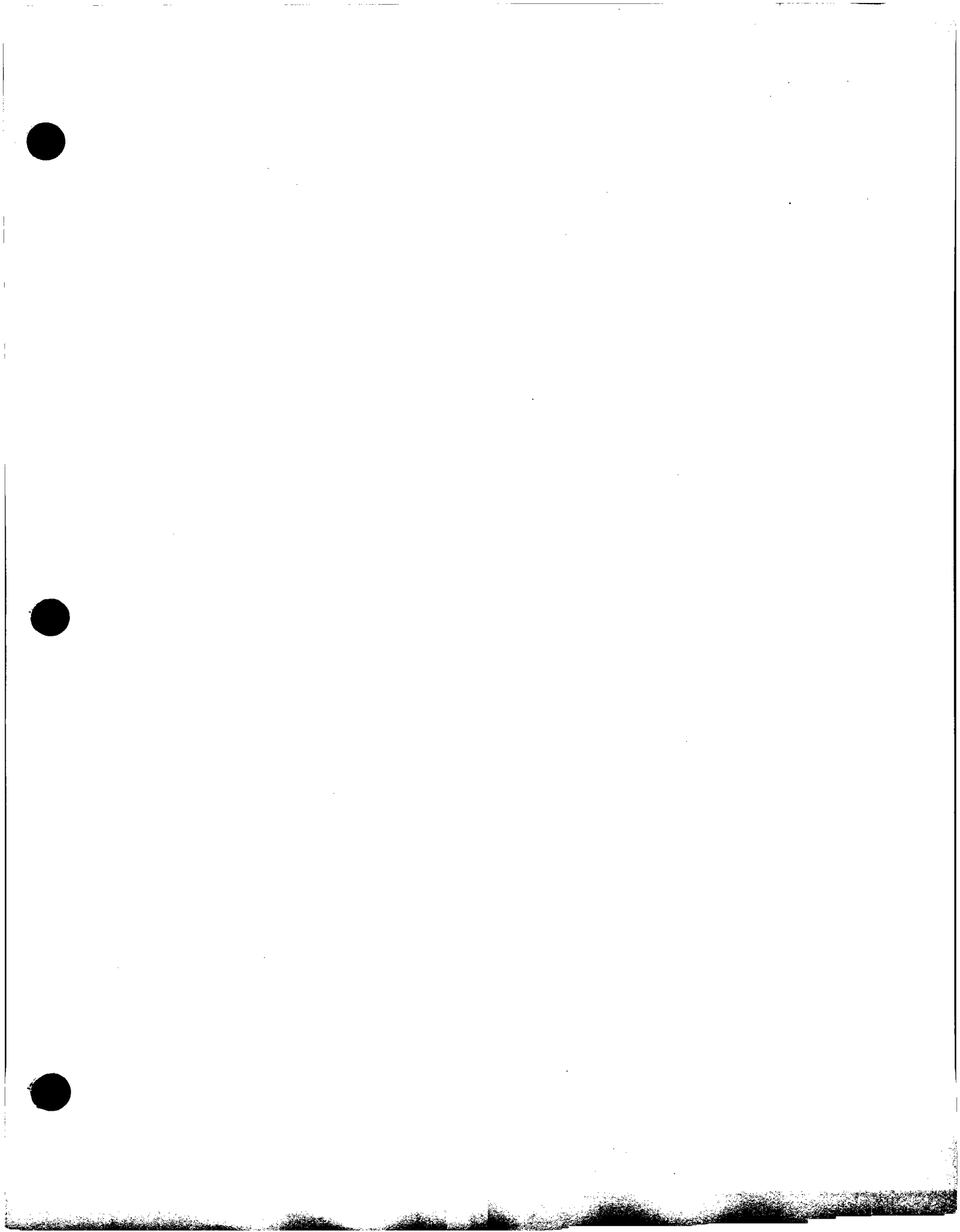
CHAIN OF CUSTODY RECORD

5/24 Vegas Lead + Only

P9905048

Page _____ of _____

PROJECT NUMBER		PROJECT NAME		REQUESTED ANALYSIS		CONTRACT LABORATORY	
SAMPLERS (Signature)		DATE		COMPOSITE OR GRAB		TOTAL NUMBER OF CONTAINERS	
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	DATE	TIME	REMARKS
51369	1024	1120	H ₂ O	199-0019	1	X	(01)
51369	1143	1120	H ₂ O	199-0020	1	X	(02)
51369	1458	1120	H ₂ O	199-0022	1	X	(03)
51469	0900	1120	H ₂ O	199-0023	1	X	(04)
51469	1533	1120	H ₂ O	199-0030	1	X	(05) <i>sample 1 sg</i>
<i>51369 5000 5000 5000 5000 5000 5000 5000</i>							
<i>Analyze - (05) for CI, TDS and Specific Conductance per Spec. 8</i>							
<i>5/17/99</i>							
RECEIVED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME	
<i>Steven George</i>		5/14/99 1735		<i>Feder</i>		5/15/99 1030	
RECEIVED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME	
<i>Steven George</i>							
REQUESTED TURNAROUND TIME:				RESULTS & INVOICES TO:			
☐ ROUTINE ☐ RUSH				TECHNICAL SERVICES DIVISION LABORATORY			
CARRIER CO.				EL PASO NATURAL GAS COMPANY			
BILL NO.				8645 RAILROAD DRIVE			
				EL PASO, TEXAS 79804			
				915-759-2229 FAX: 915-759-2335			

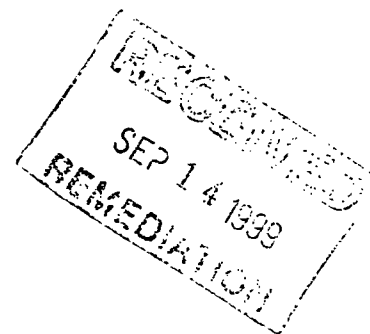


SAMPLE KEY

SAMPLE NUMBER: M99-0084 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: PUMP BLANK BEFORE SAMPLING EMP #3
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 14:00 SAMPLE DATE: 08/09/99

SAMPLE KEY

SAMPLE NUMBER: M99-0085 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: BAILER BLANK BEFORE SAMPLING
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 14:05 SAMPLE DATE: 08/09/99



SAMPLE KEY

SAMPLE NUMBER: M99-0086 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: MONITOR WELL ACW #15
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 16:20 SAMPLE DATE: 08/09/99

SAMPLE KEY

SAMPLE NUMBER: M99-0087 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: MONITOR WELL ACW #12
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:14 SAMPLE DATE: 08/11/99

SAMPLE KEY

SAMPLE NUMBER: M99-0088 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: MONITOR WELL ACW #12 DUPLICATE
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:14 SAMPLE DATE: 08/11/99

SAMPLE KEY

SAMPLE NUMBER: M99-0089 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: MONITOR WELL ACW #13
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:08 SAMPLE DATE: 08/11/99

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Irvine

Reno Division
1030 Matley Lane • Reno, Nevada 89502
(702) 348-2522 • Fax: (702) 348-2546
1-800-368-5221

CLIENT: El Paso Natural Gas Co.
8645 Railroad Dr.
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME:
PROJECT #:

NEL ORDER ID: P9908050

Attached are the analytical results for samples in support of the above referenced project.

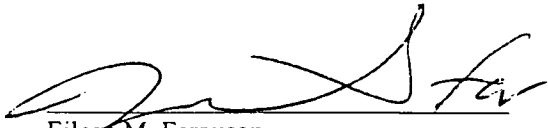
Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 8/13/99.

Samples were analyzed as received.

Where applicable we have included the following quality control data:

Method blank - used to demonstrate absence of contamination or interferences in the analytical process.
Laboratory Control Spike (LCS) - used to demonstrate laboratory ability to perform the method within specifications by spiking representative analytes into a clean matrix.
Surrogates - compounds added to each sample to ensure that the method requirements are met for each individual sample.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Eileen M. Ferguson
Laboratory Manager

8/25/99
Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0084
DATE SAMPLED: 8/9/99
NEL SAMPLE ID: P9908050-01

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	0.79	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Silica	11	0.2 mg/L	1	SM 4500Si-D	NA	8/19/99
Sodium	140	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: M99-0085

PROJECT ID:

DATE SAMPLED: 8/9/99

PROJECT #:

NEL SAMPLE ID: P9908050-02

TEST: AZ METALS PKG

MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	97	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Magnesium	22	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Potassium	5.2	1. mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Silica	21	1. mg/L	5	SM 4500Si-D	NA	8/19/99
Sodium	80	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0086
DATE SAMPLED: 8/9/99
NEL SAMPLE ID: P9908050-03

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	52	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Magnesium	19	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Potassium	5.3	1. mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Silica	24	2. mg/L	10	SM 4500Si-D	NA	8/19/99
Sodium	91	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0087
DATE SAMPLED: 8/11/99
NEL SAMPLE ID: P9908050-04

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	270	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Magnesium	96	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Potassium	9.0	1. mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Silica	29	2. mg/L	10	SM 4500Si-D	NA	8/19/99
Sodium	160	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0088
DATE SAMPLED: 8/11/99
NEL SAMPLE ID: P9908050-05

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	280	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Magnesium	98	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Potassium	9.2	1. mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Silica	36	2. mg/L	10	SM 4500Si-D	NA	8/19/99
Sodium	160	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

CLIENT ID: M99-0089

DATE SAMPLED: 8/11/99

NEL SAMPLE ID: P9908050-06

TEST: AZ METALS PKG

MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	49	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Magnesium	16	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Potassium	5.0	1. mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Silica	26	2. mg/L	10	SM 4500Si-D	NA	8/19/99
Sodium	86	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99

D.F. - Dilution Factor

ND - Not Detected

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SAMPLE KEY

SAMPLE NUMBER: M99-0090 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: BAILER BLANK AFTER SAMPLING
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:17 SAMPLE DATE: 08/11/99

SAMPLE KEY

SAMPLE NUMBER: M99-0091 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: PUMP BLANK AFTER SAMPLING EMP #3
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:40 SAMPLE DATE: 08/11/99

SAMPLE KEY

SAMPLE NUMBER: M99-0092 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: DOOMS PRODUCTION WELL
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:10 SAMPLE DATE: 08/11/99

SAMPLE KEY

SAMPLE NUMBER: M99-0093 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: OXY PRODUCTION WELL
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:30 SAMPLE DATE: 08/11/99

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0090
DATE SAMPLED: 8/11/99
NEL SAMPLE ID: P9908050-07

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	0.68	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Potassium	1.4	1. mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Silica	10	0.2 mg/L	1	SM 4500Si-D	NA	8/19/99
Sodium	140	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0091
DATE SAMPLED: 8/11/99
NEL SAMPLE ID: P9908050-08

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	45	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Magnesium	11	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Potassium	3.9	1. mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Silica	18	2. mg/L	10	SM 4500Si-D	NA	8/19/99
Sodium	77	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: AZ METALS PKG

CLIENT ID: Method Blank

DATE SAMPLED: NA

NEL SAMPLE ID: P08050-Cat-BLK

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P08050Si-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	0.2mg/L	1	SM 4500Si-D	NA	8/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0084
DATE SAMPLED: 8/9/99
NEL SAMPLE ID: P9908050-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	220			1	SM 2320 B	mg/L	8/13/99
Alkalinity - Carbonate	2			1	SM 2320 B	mg/L	8/13/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	8/13/99
Alkalinity, Total	220	25.		1	SM 2320 B	mg/L	8/13/99
Bromide	ND	0.2		1	EPA 300.0	mg/L	8/17/99
Chloride	49	2.5		25	EPA 300.0	mg/L	8/16/99
Fluoride	ND	0.4		1	SM 4500-F C	mg/L	8/17/99
Hardness, Total (as CaCO3)	2.8	1.		0.5	EPA 200.7	mg/L	8/19/99
Nitrate/Nitrite as N, Total	0.70	0.05		1	SM 4500-NO3 F	mg/L-N	8/16/99
pH	8.30	2.		1	EPA 150.1	pH Units	8/13/99
pH Temperature	20.1	1.		1	EPA 150.1	°C	8/13/99
Specific Conductance	578	1.		1	SM 2510 B	µS/cm	8/16/99
Sulfate	1.1	0.1		1	EPA 300.0	mg/L	8/13/99
Total Dissolved Solids	305	25.		1	SM 2540 C	mg/L	8/16/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0085
DATE SAMPLED: 8/9/99
NEL SAMPLE ID: P9908050-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	110		1	SM 2320 B	mg/L	8/13/99	
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	8/13/99	
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	8/13/99	
Alkalinity, Total	110	25.	1	SM 2320 B	mg/L	8/13/99	
Bromide	0.5	0.2	1	EPA 300.0	mg/L	8/17/99	
Chloride	88	5.	50	EPA 300.0	mg/L	8/16/99	
Fluoride	1.6	0.4	1	SM 4500-F C	mg/L	8/17/99	
Hardness, Total (as CaCO3)	330	1.	0.5	EPA 200.7	mg/L	8/19/99	
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	8/16/99	
pH	7.57	2.	1	EPA 150.1	pH Units	8/13/99	
pH Temperature	19.1	1.	1	EPA 150.1	°C	8/13/99	
Specific Conductance	898	1.	1	SM 2510 B	µS/cm	8/16/99	
Sulfate	190	5.	50	EPA 300.0	mg/L	8/16/99	
Total Dissolved Solids	565	25.	1	SM 2540 C	mg/L	8/16/99	

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0086
DATE SAMPLED: 8/9/99
NEL SAMPLE ID: P9908050-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
			LIMIT				
Alkalinity - Bicarbonate	170			1	SM 2320 B	mg/L	8/13/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	8/13/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	8/13/99
Alkalinity, Total	170	25.		1	SM 2320 B	mg/L	8/13/99
Bromide	0.3	0.2		1	EPA 300.0	mg/L	8/17/99
Chloride	58	2.5		25	EPA 300.0	mg/L	8/16/99
Fluoride	1.6	0.4		1	SM 4500-F C	mg/L	8/17/99
Hardness, Total (as CaCO3)	210	1.		0.5	EPA 200.7	mg/L	8/19/99
Nitrate/Nitrite as N, Total	1.8	0.5		10	SM 4500-NO3 F	mg/L-N	8/16/99
pH	7.80	2.		1	EPA 150.1	pH Units	8/13/99
pH Temperature	21.3	1.		1	EPA 150.1	°C	8/13/99
Specific Conductance	791	1.		1	SM 2510 B	µS/cm	8/16/99
Sulfate	120	2.5		25	EPA 300.0	mg/L	8/16/99
Total Dissolved Solids	471	25.		1	SM 2540 C	mg/L	8/16/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0087
DATE SAMPLED: 8/11/99
NEL SAMPLE ID: P9908050-04

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		METHOD	UNITS	ANALYZED
		LIMIT	D. F.			
Alkalinity - Bicarbonate	140		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity, Total	140	25.	1	SM 2320 B	mg/L	8/13/99
Bromide	ND	0.2	1	EPA 300.0	mg/L	8/17/99
Chloride	750	100.	1000	EPA 300.0	mg/L	8/13/99
Fluoride	0.85	0.4	1	SM 4500-F C	mg/L	8/17/99
Hardness, Total (as CaCO ₃)	1100	1.	0.5	EPA 200.7	mg/L	8/19/99
Nitrate/Nitrite as N, Total	0.45	0.05	1	SM 4500-NO ₃ F	mg/L-N	8/16/99
pH	7.35	2.	1	EPA 150.1	pH Units	8/13/99
pH Temperature	21.7	1.	1	EPA 150.1	°C	8/13/99
Specific Conductance	2650	1.	1	SM 2510 B	µS/cm	8/16/99
Sulfate	160	2.5	25	EPA 300.0	mg/L	8/13/99
Total Dissolved Solids	1750	50.	2	SM 2540 C	mg/L	8/16/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0088
DATE SAMPLED: 8/11/99
NEL SAMPLE ID: P9908050-05

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	140			1	SM 2320 B	mg/L	8/13/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	8/13/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	8/13/99
Alkalinity, Total	140	25.		1	SM 2320 B	mg/L	8/13/99
Bromide	ND	1.		5	EPA 300.0	mg/L	8/17/99
Chloride	810	100.	1000		EPA 300.0	mg/L	8/13/99
Fluoride	0.85	0.4		1	SM 4500-F C	mg/L	8/17/99
Hardness, Total (as CaCO ₃)	1100	1.		0.5	EPA 200.7	mg/L	8/19/99
Nitrate/Nitrite as N, Total	0.53	0.05		1	SM 4500-NO ₃ F	mg/L-N	8/16/99
pH	7.33	2.		1	EPA 150.1	pH Units	8/13/99
pH Temperature	21.1	1.		1	EPA 150.1	°C	8/13/99
Specific Conductance	2630	1.		1	SM 2510 B	µS/cm	8/16/99
Sulfate	160	2.5		25	EPA 300.0	mg/L	8/13/99
Total Dissolved Solids	1880	50.		2	SM 2540 C	mg/L	8/16/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0089
DATE SAMPLED: 8/11/99
NEL SAMPLE ID: P9908050-06

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		METHOD	UNITS	ANALYZED
		LIMIT	D. F.			
Alkalinity - Bicarbonate	170		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity, Total	170	25.	1	SM 2320 B	mg/L	8/13/99
Bromide	1.2	1.	5	EPA 300.0	mg/L	8/17/99
Chloride	41	2.5	25	EPA 300.0	mg/L	8/16/99
Fluoride	1.4	0.4	1	SM 4500-F C	mg/L	8/17/99
Hardness, Total (as CaCO ₃)	190	1.	0.5	EPA 200.7	mg/L	8/19/99
Nitrate/Nitrite as N, Total	1.4	0.05	1	SM 4500-NO ₃ F	mg/L-N	8/16/99
pH	7.95	2.	1	EPA 150.1	pH Units	8/13/99
pH Temperature	21.9	1.	1	EPA 150.1	°C	8/13/99
Specific Conductance	676	1.	1	SM 2510 B	µS/cm	8/16/99
Sulfate	97	2.5	25	EPA 300.0	mg/L	8/16/99
Total Dissolved Solids	359	25.	1	SM 2540 C	mg/L	8/16/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0090
DATE SAMPLED: 8/11/99
NEL SAMPLE ID: P9908050-07

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		METHOD	UNITS	ANALYZED
		LIMIT	D. F.			
Alkalinity - Bicarbonate	220		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Carbonate	2		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity, Total	220	25.	1	SM 2320 B	mg/L	8/13/99
Bromide	ND	1.	5	EPA 300.0	mg/L	8/17/99
Chloride	48	2.5	25	EPA 300.0	mg/L	8/16/99
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	8/17/99
Hardness, Total (as CaCO ₃)	2.6	1.	0.5	EPA 200.7	mg/L	8/19/99
Nitrate/Nitrite as N, Total	0.74	0.05	1	SM 4500-NO ₃ F	mg/L-N	8/16/99
pH	8.41	2.	1	EPA 150.1	pH Units	8/13/99
pH Temperature	21.0	1.	1	EPA 150.1	°C	8/13/99
Specific Conductance	580	1.	1	SM 2510 B	µS/cm	8/16/99
Sulfate	1.0	0.1	1	EPA 300.0	mg/L	8/13/99
Total Dissolved Solids	266	25.	1	SM 2540 C	mg/L	8/16/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

CLIENT ID: M99-0091

DATE SAMPLED: 8/11/99

NEL SAMPLE ID: P9908050-08

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	130		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity, Total	130	25.	1	SM 2320 B	mg/L	8/13/99
Bromide	2.1	1.	5	EPA 300.0	mg/L	8/17/99
Chloride	70	5.	50	EPA 300.0	mg/L	8/16/99
Fluoride	1.7	0.4	1	SM 4500-F C	mg/L	8/17/99
Hardness, Total (as CaCO ₃)	160	1.	0.5	EPA 200.7	mg/L	8/19/99
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO ₃ F	mg/L-N	8/16/99
pH	8.32	2.	1	EPA 150.1	pH Units	8/13/99
pH Temperature	22.1	1.	1	EPA 150.1	°C	8/13/99
Specific Conductance	588	1.	1	SM 2510 B	µS/cm	8/16/99
Sulfate	53	1.	10	EPA 300.0	mg/L	8/13/99
Total Dissolved Solids	305	25.	1	SM 2540 C	mg/L	8/16/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: 990813ALK-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity, Total	ND	25	1	SM 2320 B	mg/L	8/13/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: 990813ICAQ-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	8/13/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	8/13/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: 990813ICAQ2-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	8/13/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: 990816ICAQ-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	8/16/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	8/16/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Non-Metals

CLIENT ID: Method Blank

DATE SAMPLED: NA

NEL SAMPLE ID: 990816NO2NO3B-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	8/16/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: 990816TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Total Dissolved Solids	ND	25	1	SM 2540 C	mg/L	8/16/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: 990817F-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	8/17/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: 990817ICAQ-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	8/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: M99-0084

PROJECT ID:

DATE SAMPLED: 8/9/99

PROJECT #:

NEL SAMPLE ID: P9908050-01

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 8/21/99

DILUTION: 1

ANALYZED: 8/21/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	97	86 - 115
Toluene-d8	97	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0085
DATE SAMPLED: 8/9/99
NEL SAMPLE ID: P9908050-02

TEST: Volatile Organic Compounds by EPA 8260B, December 1996
METHOD: EPA 8260B
MATRIX: Aqueous
DILUTION: 1

ANALYST: SKV - Las Vegas Division
EXTRACTED: 8/21/99
ANALYZED: 8/21/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	100	86 - 115
Toluene-d8	96	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

CLIENT ID: M99-0086

DATE SAMPLED: 8/9/99

NEL SAMPLE ID: P9908050-03

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

METHOD: EPA 8260B

MATRIX: Aqueous

DILUTION: 1

ANALYST: SKV - Las Vegas Division

EXTRACTED: 8/21/99

ANALYZED: 8/21/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	102	86 - 115
Toluene-d8	98	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: M99-0087

PROJECT ID:

DATE SAMPLED: 8/11/99

PROJECT #:

NEL SAMPLE ID: P9908050-04

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 8/21/99

DILUTION: 1

ANALYZED: 8/21/99

PARAMETER	Result	Reporting Limit
Benzene	5.3 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	104	86 - 115
Toluene-d8	99	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: M99-0088

PROJECT ID:

DATE SAMPLED: 8/11/99

PROJECT #:

NEL SAMPLE ID: P9908050-05

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 8/21/99

DILUTION: 1

ANALYZED: 8/21/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	2.4 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	105	86 - 115
Toluene-d8	98	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: M99-0089

PROJECT ID:

DATE SAMPLED: 8/11/99

PROJECT #:

NEL SAMPLE ID: P9908050-06

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 8/21/99

DILUTION: 1

ANALYZED: 8/21/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	101	86 - 115
Toluene-d8	98	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: M99-0090

PROJECT ID:

DATE SAMPLED: 8/11/99

PROJECT #:

NEL SAMPLE ID: P9908050-07

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 8/21/99

DILUTION: 1

ANALYZED: 8/21/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	100	86 - 115
Toluene-d8	99	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: M99-0091

PROJECT ID:

DATE SAMPLED: 8/11/99

PROJECT #:

NEL SAMPLE ID: P9908050-08

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 8/21/99

DILUTION: 1

ANALYZED: 8/21/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	104	85 - 115
Toluene-d8	99	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990821BTEX60-BLK

TEST: Volatile Organic Compounds by EPA 8260B, December 1996
METHOD: EPA 8260B
MATRIX: Aqueous

ANALYST: SKV - Las Vegas Division
EXTRACTED: 8/21/99
ANALYZED: 8/21/99

PARAMETER	Result	Reporting Limit
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	105	86 - 115
Toluene-d8	97	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	990813ALK-LCS	125	121	97	85 - 115	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990813ICAQ-LCS	100	104	104	90 - 110	
Chloride	990813ICAQ-LCSD	100	104	104	90 - 110	
Sulfate	990813ICAQ-LCS	100	105	105	90 - 110	
Sulfate	990813ICAQ-LCSD	100	106	106	90 - 110	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike</u> <u>Amount</u>	<u>Spike</u> <u>Result</u>	<u>Percent</u> <u>Recovery</u>	<u>Acceptable</u> <u>Range</u>	<u>RPD</u>
Sulfate	990813ICAQ2-LCS	100	105	105	90 - 110	
Sulfate	990813ICAQ2-LCSD	100	106	106	90 - 110	0.9
Sulfate	P9908050-08-MS	100	138	85	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	990813PH2-LCS	7	6.995	100	99 - 101	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	990816COND-LCS	1412	1398	99	95 - 105	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990816ICAQ-LCS	100	100	100	90 - 110	
Chloride	990816ICAQ-LCSD	100	99	99	90 - 110	1.
Chloride	P9908049-02-MS	100	234	94	80 - 120	
Sulfate	990816ICAQ-LCS	100	95	95	90 - 110	
Sulfate	990816ICAQ-LCSD	100	92	92	90 - 110	3.2
Sulfate	P9908049-02-MS	100	94	94	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	990816NO2NO3B-LCS	0.5	0.5086	102	90 - 110	
Nitrate/Nitrite as N, Total	L9908092-06-MS	1	1.233	98	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	990816TDS-LCS	1000	929	93	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	990817F-LCS	1	0.999	100	85 - 115	
Fluoride	990817F-LCSD	1	0.871	87	85 - 115	13.7
Fluoride	P9908050-01-MS	1	1.12	112	80 - 120	
Fluoride	P9908050-01-MSD	1	1.13	113	80 - 120	0.9

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Bromide	990817ICAQ-LCS	100	93	93	90 - 110	
Bromide	P9908050-04-MS	100	95	95	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
 PROJECT ID:
 PROJECT #:
 TEST: Volatile Organic Compounds by EPA 8260B, December 1996
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	990821BTEX60-LCS	50	48	96	80 - 120	
Benzene	P9908050-08-MS	50	51	102	76 - 127	
Benzene	P9908050-08-MSD	50	50	100	76 - 127	2.
Toluene	990821BTEX60-LCS	50	50	100	80 - 120	
Toluene	P9908050-08-MS	50	51	102	76 - 125	
Toluene	P9908050-08-MSD	50	51	102	76 - 125	0.
Ethylbenzene	990821BTEX60-LCS	50	52	104	80 - 120	
Ethylbenzene	P9908050-08-MS	50	48	96	70 - 130	
Ethylbenzene	P9908050-08-MSD	50	50	100	70 - 130	4.1
Total Xylenes	990821BTEX60-LCS	150	152	101	80 - 120	
Total Xylenes	P9908050-08-MS	150	148	99	70 - 130	
Total Xylenes	P9908050-08-MSD	150	148	99	70 - 130	0.

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Calcium	P08050-Cat-LCS	20	20.7	103	85 - 115	
Calcium	P9908050-01-MS	20	21.4	103	75 - 125	
Calcium	P9908050-01-MSD	20	21.6	104	75 - 125	1.
Magnesium	P08050-Cat-LCS	20	20.7	103	85 - 115	
Magnesium	P9908050-01-MS	20	20.7	103	75 - 125	
Magnesium	P9908050-01-MSD	20	20.9	104	75 - 125	1.
Potassium	P08050-Cat-LCS	20	20.3	102	85 - 115	
Potassium	P9908050-01-MS	20	21.3	107	75 - 125	
Potassium	P9908050-01-MSD	20	21.2	106	75 - 125	0.5
Sodium	P08050-Cat-LCS	20	20.9	105	85 - 115	
Sodium	P9908050-01-MS	20	165	125	75 - 125	
Sodium	P9908050-01-MSD	20	159	95	75 - 125	27.3

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Silica	P08050Si-LCS	10	9.47	95	85 - 115	
Silica	P9908050-01-MS	5	16.07	101	75 - 125	
Silica	P9908050-01-MSD	5	15.08	82	75 - 125	21.6

ND - Not Detected

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PROJECT NUMBER		PROJECT NAME		DATE:		SAMPLES: (Signature)	
LAB ID		DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	COMPOSITE OR GRAB
81911400	H ₂ O				199-0084	5	PH, P+T AMK, CI, Sulfate, HARDEN, Mg, Na, Sulfate, F, K, Bromide, Nitrate, TDS, Sp. Conductance, BTEx
81911405	H ₂ O				199-0085	5	
81911680	H ₂ O				199-0086	5	
81911014	H ₂ O				199-0087	5	
81911017	H ₂ O				199-0088	5	
81911308	H ₂ O				199-0089	5	
81911317	H ₂ O				199-0090	5	
81911340	H ₂ O				199-0091	5	
RELINQUISHED BY: (Signature) <i>[Signature]</i> DATE/TIME: 8/15/00 RECEIVED BY: (Signature) <i>[Signature]</i> DATE/TIME: 8/15/00							
RELINQUISHED BY: (Signature) <i>[Signature]</i> DATE/TIME: 8/15/00 RECEIVED BY: (Signature) <i>[Signature]</i> DATE/TIME: 8/15/00							
REQUESTED TURNAROUND TIME: _____ CARRIER CO. _____ BILL NO.: _____							
SAMPLE RECEIPT REMARKS				RESULTS & INVOICES TO:			
CHARGE CODE				LABORATORY SERVICES EL PASO NATURAL GAS COMPANY 8645 RAILROAD DRIVE EL PASO, TEXAS 79904 915-759-2229 FAX 915-759-2335			

White - Testing Laboratory Canary - EPNG Lab Pink - Field Sampler

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Irvine

Reno Division
1030 Matley Lane • Reno, Nevada 89502
(702) 348-2522 • Fax: (702) 348-2546
1-800-368-5221

CLIENT: El Paso Natural Gas Co.
8645 Railroad Dr.
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME:
PROJECT #:

NEL ORDER ID: P9908049

Attached are the analytical results for samples in support of the above referenced project.

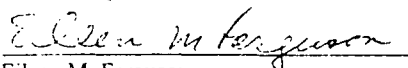
Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 8/13/99.

Samples were analyzed as received.

Where applicable we have included the following quality control data:

Method blank - used to demonstrate absence of contamination or interferences in the analytical process.
Laboratory Control Spike (LCS) - used to demonstrate laboratory ability to perform the method within specifications by spiking representative analytes into a clean matrix.
Surrogates - compounds added to each sample to ensure that the method requirements are met for each individual sample.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Eileen M. Ferguson
Laboratory Manager

8/23/99
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: M99-0092

PROJECT ID:

DATE SAMPLED: 8/11/99

PROJECT #:

NEL SAMPLE ID: P9908049-01

TEST: AZ METALS PKG

MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	51	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Magnesium	17	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Potassium	3.8	1. mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Silica	27	2. mg/L	10	SM 4500Si-D	NA	8/19/99
Sodium	73	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0093
DATE SAMPLED: 8/11/99
NEL SAMPLE ID: P9908049-02

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	75	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Magnesium	22	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Potassium	4.7	1. mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Silica	27	2. mg/L	10	SM 4500Si-D	NA	8/19/99
Sodium	72	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: AZ METALS PKG

CLIENT ID: Method Blank

DATE SAMPLED: NA

NEL SAMPLE ID: P08050-Cat-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	8/16/99	8/19/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	8/16/99	8/19/99

D. F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: P08050Si-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	0.2mg/L	1	SM 4500Si-D	NA	8/19/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0092
DATE SAMPLED: 8/11/99
NEL SAMPLE ID: P9908049-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	190		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity, Total	190	25.	1	SM 2320 B	mg/L	8/13/99
Bromide	0.2	0.2	1	EPA 300.0	mg/L	8/17/99
Chloride	30	1.	10	EPA 300.0	mg/L	8/13/99
Fluoride	0.83	0.4	1	SM 4500-F C	mg/L	8/17/99
Hardness, Total (as CaCO3)	200	1.	0.5	EPA 200.7	mg/L	8/19/99
Nitrate, Nitrite as N, Total	1.1	0.05	1	SM 4500-NO3 F	mg/L-N	8/16/99
pH	7.69	2.	1	EPA 150.1	pH Units	8/13/99
pH Temperature	19.8	1.	1	EPA 150.1	°C	8/13/99
Specific Conductance	629	1.	1	SM 2510 B	µS/cm	8/16/99
Sulfate	79	1.	10	EPA 300.0	mg/L	8/13/99
Total Dissolved Solids	372	25.	1	SM 2540 C	mg/L	8/16/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0093
DATE SAMPLED: 8/11/99
NEL SAMPLE ID: P9908049-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		METHOD	UNITS	ANALYZED
		LIMIT	D. F.			
Alkalinity - Bicarbonate	140		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity, Total	140	25.	1	SM 2320 B	mg/L	8/13/99
Bromide	0.5	0.2	1	EPA 300.0	mg/L	8/17/99
Chloride	140	10.	100	EPA 300.0	mg/L	8/16/99
Fluoride	1.0	0.4	1	SM 4500-F C	mg/L	8/17/99
Hardness, Total (as CaCO3)	280	1.	0.5	EPA 200.7	mg/L	8/19/99
Nitrate/Nitrite as N, Total	0.78	0.05	1	SM 4500-NO3 F	mg/L-N	8/16/99
pH	7.67	2.	1	EPA 150.1	pH Units	8/13/99
pH Temperature	20.5	1.	1	EPA 150.1	°C	8/13/99
Specific Conductance	831	1.	1	SM 2510 B	µS/cm	8/16/99
Sulfate	59	1.	10	EPA 300.0	mg/L	8/13/99
Total Dissolved Solids	466	25.	1	SM 2540 C	mg/L	8/16/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 990813ALK-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	8/13/99
Alkalinity, Total	ND	25	1	SM 2320 B	mg/L	8/13/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: 990813ICAQ-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	8/13/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	8/13/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: 990816ICAQ-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	8/16/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: 990816NO2NO3-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	8/16/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: 990816TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Total Dissolved Solids	ND	25	1	SM 2540 C	mg/L	8/16/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: 990817F-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	8/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: Method Blank

PROJECT ID:

DATE SAMPLED: NA

PROJECT #:

NEL SAMPLE ID: 990817ICAQ-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZE</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	8/17/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: M99-0092
DATE SAMPLED: 8/11/99
NEL SAMPLE ID: P9908049-01

TEST: Volatile Organic Compounds by EPA 8260B, December 1996
METHOD: EPA 8260B
MATRIX: Aqueous
DILUTION: 1

ANALYST: SKV - Las Vegas Division
EXTRACTED: 8/20/99
ANALYZED: 8/20/99

PARAMETER	Result	Reporting Limit
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	99	86 - 115
Toluene-d8	94	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

CLIENT ID: M99-0093

PROJECT ID:

DATE SAMPLED: 8/11/99

PROJECT #:

NEL SAMPLE ID: P9908049-02

TEST: Volatile Organic Compounds by EPA 8260B, December 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 8/20/99

DILUTION: 1

ANALYZED: 8/20/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	99	86 - 115
Toluene-d8	96	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:

CLIENT ID: **Method Blank**
DATE SAMPLED: NA
NEL SAMPLE ID: 990820BTEX60-BLK

TEST: **Volatile Organic Compounds by EPA 8260B, December 1996**

METHOD: EPA 8260B

MATRIX: Aqueous

ANALYST: SKV - Las Vegas Division

EXTRACTED: 8/20/99

ANALYZED: 8/20/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	98	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	990813ALK-LCS	125	121	97	85 - 115	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	990813ICAQ-LCS	100	104	104	90 - 110	
Chloride	990813ICAQ-LCSD	100	104	104	90 - 110	
Sulfate	990813ICAQ-LCS	100	105	105	90 - 110	
Sulfate	990813ICAQ-LCSD	100	106	106	90 - 110	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.
PROJECT ID:
PROJECT #:
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	990813PH2-LCS	7	6.995	100	99 - 101	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	990816COND-LCS	1412	1398	99	95 - 105	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike</u> <u>Amount</u>	<u>Spike</u> <u>Result</u>	<u>Percent</u> <u>Recovery</u>	<u>Acceptable</u> <u>Range</u>	<u>RPD</u>
Chloride	990816ICAQ-LCS	100	100	100	90 - 110	
Chloride	990816ICAQ-LCSD	100	99	99	90 - 110	1.
Chloride	P9908049-02-MS	100	234	94	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	990816NO2NO3-LCS	0.5	0.5045	101	90 - 110	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	990816TDS-LCS	1000	929	93	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	990817F-LCS	1	0.999	100	85 - 115	
Fluoride	990817F-LCSD	1	0.871	87	85 - 115	13.7
Fluoride	P9908050-01-MS	1	1.12	112	80 - 120	
Fluoride	P9908050-01-MSD	1	1.13	113	80 - 120	0.9

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Bromide	990817ICAQ-LCS	100	93	93	90 - 110	
Bromide	P9908050-04-MS	100	95	95	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Calcium	P08050-Cat-LCS	20	20.7	103	85 - 115	
Calcium	P9908050-01-MS	20	21.4	103	75 - 125	
Calcium	P9908050-01-MSD	20	21.6	104	75 - 125	1.
Magnesium	P08050-Cat-LCS	20	20.7	103	85 - 115	
Magnesium	P9908050-01-MS	20	20.7	103	75 - 125	
Magnesium	P9908050-01-MSD	20	20.9	104	75 - 125	1.
Potassium	P08050-Cat-LCS	20	20.3	102	85 - 115	
Potassium	P9908050-01-MS	20	21.3	107	75 - 125	
Potassium	P9908050-01-MSD	20	21.2	106	75 - 125	0.5
Sodium	P08050-Cat-LCS	20	20.9	105	85 - 115	
Sodium	P9908050-01-MS	20	165	125	75 - 125	
Sodium	P9908050-01-MSD	20	159	95	75 - 125	27.3

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Co.

PROJECT ID:

PROJECT #:

TEST: Metals

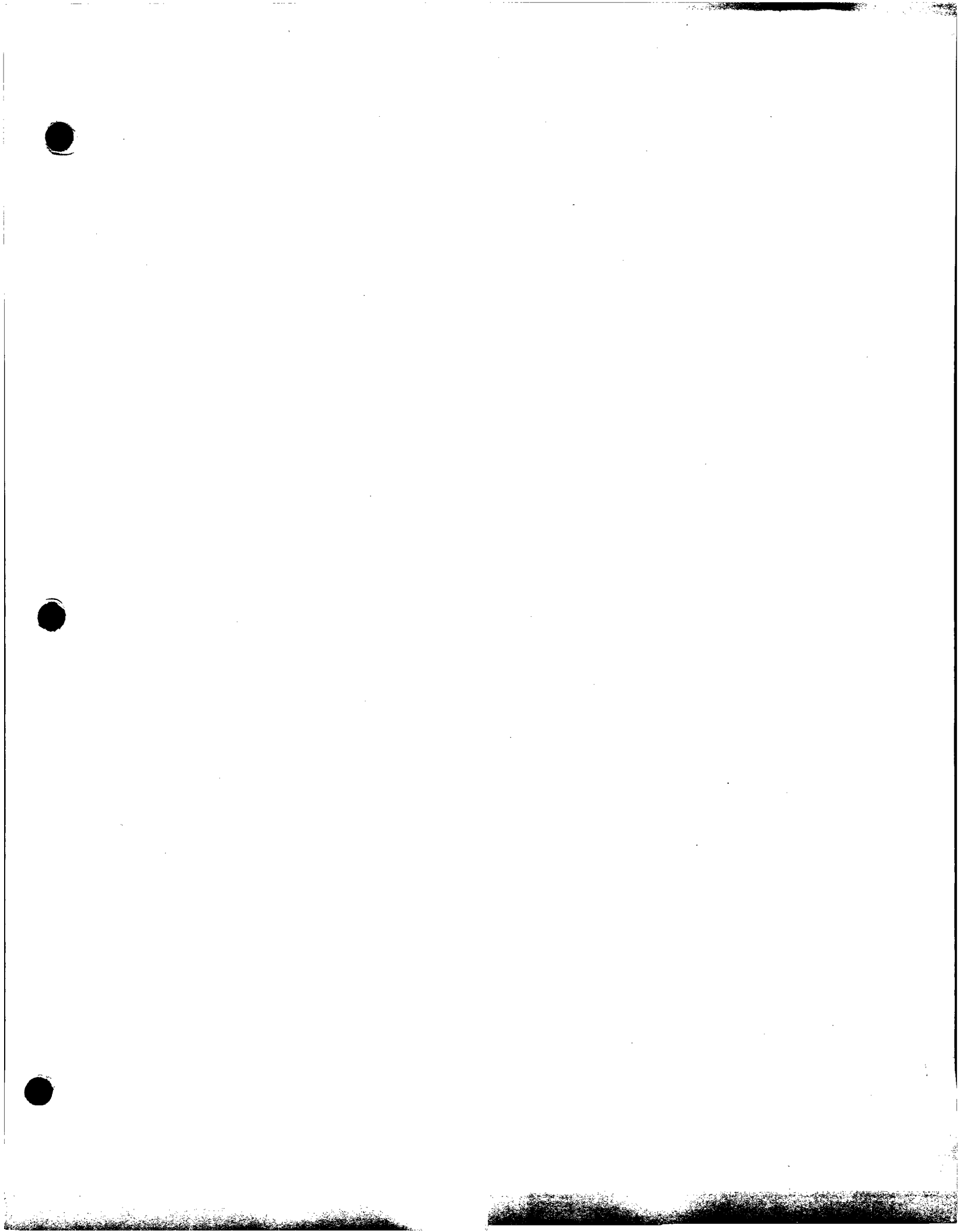
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Silica	P08050Si-LCS	10	9.47	95	85 - 115	
Silica	P9908050-01-MS	5	16.07	101	75 - 125	
Silica	P9908050-01-MSD	5	15.08	82	75 - 125	21.6

ND - Not Detected

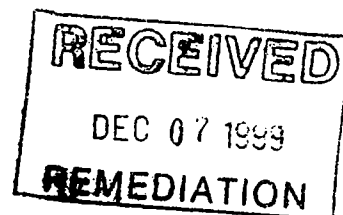
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PROJECT NUMBER		PROJECT NAME		DATE		SAMPLERS: (Signature)	
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	COMPOSITE OR GRAB	REQUESTED ANALYSIS
811691510	11/20		1999-0099A	5			PH, P+T ALK, CI, SULFATE, T. HARD, SA, Mg, NA, SILICA, F, K, Bromide, Nitrate, TDS, sp Conductance, BTEX
811691530	11/20		1999-0099B	5			
RELINQUISHED BY: (Signature)				DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME	RELINQUISHED BY: (Signature)
RELINQUISHED BY: (Signature)				DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME	RELINQUISHED BY: (Signature)
REQUESTED TURNAROUND TIME:				SAMPLE RECEIPT REMARKS			
ROUTINE ☐ RUSH ☐				CHARGE CODE			
CARRIER CO.				RESULTS & INVOICES TO:			
EIT NO:				LABORATORY SERVICES EL PASO NATURAL GAS COMPANY 8645 RAILROAD DRIVE EL PASO, TEXAS 79904 915-759-2229 FAX: 915-759-2335			



SAMPLE KEY

SAMPLE NUMBER: M99-0180 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: EMP #3 before purging wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:30 SAMPLE DATE: 10/18/99



SAMPLE KEY

SAMPLE NUMBER: M99-0181 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well # ACW2A
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 17:05 SAMPLE DATE: 10/18/99

SAMPLE KEY

SAMPLE NUMBER: M99-0182 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Bailer before sampling wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 14:00 SAMPLE DATE: 10/18/99

SAMPLE KEY

SAMPLE NUMBER: M99-0183 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well #ENSR2
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:50 SAMPLE DATE: 10/19/99

SAMPLE KEY

SAMPLE NUMBER: M99-0184 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well #ACW4
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:05 SAMPLE DATE: 10/19/99

SAMPLE KEY

SAMPLE NUMBER: M99-0185 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well #ACW3
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 14:40 SAMPLE DATE: 10/19/99

SAMPLE KEY

SAMPLE NUMBER: M99-0186 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well #ACW8
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 16:07 SAMPLE DATE: 10/19/99

SAMPLE KEY

SAMPLE NUMBER: M99-0187 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well #ACW1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 17:15 SAMPLE DATE: 10/19/99

SAMPLE KEY

SAMPLE NUMBER: M99-0188 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ENSR#1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:40 SAMPLE DATE: 10/20/99

SAMPLE KEY

SAMPLE NUMBER: M99-0189 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ENSR#3
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:30 SAMPLE DATE: 10/20/99

SAMPLE KEY

SAMPLE NUMBER: M99-0190 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ENSR#3 Dup.
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:30 SAMPLE DATE: 10/20/99

SAMPLE KEY

SAMPLE NUMBER: M99-0191 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well PTP#1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:30 SAMPLE DATE: 10/20/99

SAMPLE KEY

SAMPLE NUMBER: M99-0192 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW#11
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 16:30 SAMPLE DATE: 10/20/99

SAMPLE KEY

SAMPLE NUMBER: M99-0193 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Dooms Production well
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:30 SAMPLE DATE: 10/21/99

SAMPLE KEY

SAMPLE NUMBER: M99-0194 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW#7
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:00 SAMPLE DATE: 10/21/99

SAMPLE KEY

SAMPLE NUMBER: M99-0195 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW#6
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:35 SAMPLE DATE: 10/21/99

SAMPLE KEY

SAMPLE NUMBER: M99-0196 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW#5
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:02 SAMPLE DATE: 10/21/99

SAMPLE KEY

SAMPLE NUMBER: M99-0197 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW#15
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 16:45 SAMPLE DATE: 10/21/99

SAMPLE KEY

SAMPLE NUMBER: M99-0198 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Bailer middle of sampling
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:45 SAMPLE DATE: 10/22/99

SAMPLE KEY

SAMPLE NUMBER: M99-0199 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW#9
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:28 SAMPLE DATE: 10/22/99

SAMPLE KEY

SAMPLE NUMBER: M99-0200 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: EMP#3 middle of purging wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:50 SAMPLE DATE: 10/22/99

SAMPLE KEY

SAMPLE NUMBER: M99-0201 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW#10
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:14 SAMPLE DATE: 10/22/99

SAMPLE KEY

SAMPLE NUMBER: M99-0202 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW#12
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:58 SAMPLE DATE: 10/22/99

SAMPLE KEY

SAMPLE NUMBER: M99-0203 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: OXY Production well
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:10 SAMPLE DATE: 10/22/99

SAMPLE KEY

SAMPLE NUMBER: M99-0204 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW#12 Dup.
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:58 SAMPLE DATE: 10/22/99

SAMPLE KEY

SAMPLE NUMBER: M99-0205 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW#13
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:50 SAMPLE DATE: 10/22/99

SAMPLE KEY

SAMPLE NUMBER: M99-0206 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW#17
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:05 SAMPLE DATE: 10/23/99

SAMPLE KEY

SAMPLE NUMBER: M99-0207 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: EMP#3 after purging wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:30 SAMPLE DATE: 10/23/99

SAMPLE KEY

SAMPLE NUMBER: M99-0208 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Bailer after sampling wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:40 SAMPLE DATE: 10/23/99

SAMPLE KEY

SAMPLE NUMBER: M99-0209 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Field blank
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:00 SAMPLE DATE: 10/23/99

SAMPLE KEY

SAMPLE NUMBER: M99-0210 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Production well #1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:00 SAMPLE DATE: 10/23/99

NEL LABORATORIES

Reno • Las Vegas
Phoenix • So. California

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL#4 Monitor Wells
PROJECT NUMBER: NA

NEL ORDER ID: P9910092

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/22/99.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some results have been flagged as follows:

P - Sample was received with a pH greater than 2.

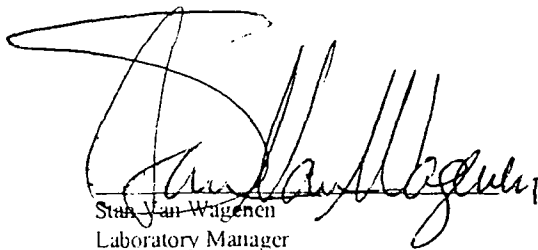
Some QA results have been flagged as follows:

C - Sample concentration is a least 5 times greater than spike contribution. Spike recovery criteria do not apply.

II - The batch MS and/or MSD were outside acceptance limits. The batch LCS was acceptable.

Some surrogate results have been flagged as follows:

Sf - This surrogate was outside acceptance limits.


Stan Van Wageningen
Laboratory Manager

11/18/99
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
OBJECT #: NA

CLIENT ID: M99-0180
DATE SAMPLED: 10/18/99
NEL SAMPLE ID: P9910092-01

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.043	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Arsenic	0.0076	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Barium	0.053	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	0.22	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	88	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	0.0035	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	0.69	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Magnesium	21	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	0.051	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99
Molybdenum	0.0062	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	5.6	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Silica	25	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	92	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Zinc	0.11	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
OBJECT #: NA

CLIENT ID: M99-0181
DATE SAMPLED: 10/18/99
NEL SAMPLE ID: P9910092-02

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.35	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Arsenic	3.6	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Barium	0.48	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	2.3	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	0.016	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	4.2	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	0.0041	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	0.0086	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	0.30	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Magnesium	1.1	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	0.0041	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Mercury	0.00051	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99
Molybdenum	0.085	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	0.041	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	14	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Silica	26	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	6100	25. mg/L	50	EPA 200.7	10/25/99	10/26/99
Uranium	0.037	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
PROJECT #: NA

CLIENT ID: M99-0182
DATE SAMPLED: 10/18/99
NEL SAMPLE ID: P9910092-03

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Arsenic	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Barium	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	ND	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	0.39	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	0.060	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Silica	ND	1. mg/L	1	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
OBJECT #: NA

CLIENT ID: M99-0184
DATE SAMPLED: 10/19/99
NEL SAMPLE ID: P9910092-04

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.025 mg/L	0.5	FPA 200.7	10/25/99	10/26/99
Arsenic	0.092	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Barium	0.15	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	1.4	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	650	2.5 mg/L	5	EPA 200.7	10/25/99	10/26/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	0.018	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	0.0080	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	0.23	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Magnesium	370	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	12	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99
Molybdenum	0.0076	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	170	10. mg/L	5	EPA 200.7	10/25/99	10/26/99
Silica	14	1. mg/L	1	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	42000	25. mg/L	50	EPA 200.7	10/25/99	10/26/99
Uranium	0.14	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
PROJECT #: NA

CLIENT ID: M99-0186
DATE SAMPLED: 10/19/99
NEL SAMPLE ID: P9910092-05

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Arsenic	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Barium	0.11	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	0.83	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	500	2.5 mg/L	5	EPA 200.7	10/25/99	10/26/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	2.7	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Magnesium	230	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	2.4	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99
Molybdenum	0.031	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	99	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Ca	16	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Mer	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	12000	25. mg/L	50	EPA 200.7	10/25/99	10/26/99
Uranium	0.048	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA

CLIENT ID: M99-0187
 DATE SAMPLED: 10/19/99
 NEL SAMPLE ID: P9910092-06

TEST: AZ METALS PKG
 MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.047	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Arsenic	0.62	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Barium	0.33	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	1.2	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	160	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	1.6	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Magnesium	110	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	0.13	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99
Molybdenum	0.013	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	13	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Silica	24	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	3100	2.5 mg/L	5	EPA 200.7	10/25/99	10/26/99
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
OBJECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10089-Hg-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: P10092i-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Aluminum	ND	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Barium	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	ND	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
PROJECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10092M-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Arsenic	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
JECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10092M-U-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.001 mg/L	1	EPA 200.8	10/25/99	10/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
JECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10092Si-BLK

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	10. mg/L	10	SM 4500Si-D	NA	11/9/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA

CLIENT ID: M99-0180
 DATE SAMPLED: 10/18/99
 NEL SAMPLE ID: P9910092-01

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	96			1	SM 2320 B	mg/L	10/27/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	10/27/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	10/27/99
Alkalinity, Total	96	25.		1	SM 2320 B	mg/L	10/27/99
Bromide	0.65	0.2		1	EPA 300.0	mg/L	11/3/99
Chloride	140	10.	100		EPA 300.0	mg/L	11/3/99
Fluoride	1.7	0.4		1	SM 4500-F C	mg/L	10/28/99
Hardness, Total (as CaCO3)	310	1.	0.5		EPA 200.7	mg/L	10/26/99
Nitrate/Nitrite as N, Total	0.29	0.05		1	SM 4500-NO3 F	mg/L-N	11/4/99
pH	7.37	2.		1	EPA 150.1	pH Units	10/22/99
pH Temperature	20.7	1.		1	EPA 150.1	°C	10/22/99
Specific Conductance	1070	1.		1	SM 2510 B	µS/cm	10/26/99
Sulfate	200	50.	100		EPA 300.0	mg/L	11/3/99
Total Dissolved Solids	673	15.		1	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA

CLIENT ID: M99-0181
 DATE SAMPLED: 10/18/99
 NEL SAMPLE ID: P9910092-02

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	1700			2	SM 2320 B	mg/L	10/27/99
Alkalinity - Carbonate	990			2	SM 2320 B	mg/L	10/27/99
Alkalinity - Hydroxide	ND			2	SM 2320 B	mg/L	10/27/99
Alkalinity, Total	2700	50.		2	SM 2320 B	mg/L	10/27/99
Bromide	ND	4.		20	EPA 300.0	mg/L	11/3/99
Chloride	7600	250.	2500		EPA 300.0	mg/L	11/4/99
Fluoride	16	8.		20	SM 4500-F C	mg/L	10/28/99
Hardness, Total (as CaCO ₃)	15	1.	0.5		EPA 200.7	mg/L	10/26/99
Nitrate/Nitrite as N, Total	ND	0.05		1	SM 4500-NO ₃ F	mg/L-N	11/4/99
pH	9.42	2.		1	EPA 150.1	pH Units	10/22/99
pH Temperature	19.8	1.		1	EPA 150.1	°C	10/22/99
Specific Conductance	24000	1.		1	SM 2510 B	µS/cm	10/26/99
Sulfate	25	10.		20	EPA 300.0	mg/L	11/3/99
Total Dissolved Solids	13000	300.		20	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA

CLIENT ID: M99-0182
 DATE SAMPLED: 10/18/99
 NEL SAMPLE ID: P9910092-03

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	ND			1	SM 2320 B	mg/L	10/27/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	10/27/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	10/27/99
Alkalinity, Total	ND	25.		1	SM 2320 B	mg/L	10/27/99
Bromide	ND	0.2		1	EPA 300.0	mg/L	11/3/99
Chloride	0.34	0.1		1	EPA 300.0	mg/L	11/3/99
Fluoride	ND	0.4		1	SM 4500-F C	mg/L	10/28/99
Hardness, Total (as CaCO ₃)	ND	1.	0.5		EPA 200.7	mg/L	10/26/99
Nitrate/Nitrite as N, Total	0.064	0.05		1	SM 4500-NO ₃ F	mg/L-N	11/4/99
pH	6.04	2.		1	EPA 150.1	pH Units	10/22/99
pH Temperature	20.2	1.		1	EPA 150.1	°C	10/22/99
Specific Conductance	4.00	1.		1	SM 2510 B	µS/cm	10/26/99
Sulfate	ND	0.5		1	EPA 300.0	mg/L	11/3/99
Total Dissolved Solids	ND	15.		1	SM 2540 C	mg/L	10/25/99

D.F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA

CLIENT ID: M99-0184
 DATE SAMPLED: 10/19/99
 NEL SAMPLE ID: P9910092-04

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	REPORTING			METHOD	UNITS	ANALYZED
	RESULT	LIMIT	D. F.			
Alkalinity - Bicarbonate	500		1	SM 2320 B	mg/L	10/27/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	10/27/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	10/27/99
Alkalinity, Total	500	25.	1	SM 2320 B	mg/L	10/27/99
Bromide	ND	20.	100	EPA 300.0	mg/L	11/3/99
Chloride	44000	1000.	10000	EPA 300.0	mg/L	11/3/99
Fluoride	0.64	0.4	1	SM 4500-F C	mg/L	10/28/99
Hardness, Total (as CaCO ₃)	3200	1.	0.5	EPA 200.7	mg/L	10/26/99
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO ₃ F	mg/L-N	11/4/99
pH	6.95	2.	1	EPA 150.1	pH Units	10/22/99
pH Temperature	20.7	1.	1	EPA 150.1	°C	10/22/99
Specific Conductance	95000	1.	1	SM 2510 B	µS/cm	10/26/99
Sulfate	1300	500.	1000	EPA 300.0	mg/L	11/4/99
Total Dissolved Solids	46300	1500.	100	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA

CLIENT ID: M99-0186
 DATE SAMPLED: 10/19/99
 NEL SAMPLE ID: P9910092-05

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	490			1	SM 2320 B	mg/L	10/29/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	10/29/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	10/29/99
Alkalinity, Total	490	25.		1	SM 2320 B	mg/L	10/29/99
Bromide	ND	10.		50	EPA 300.0	mg/L	11/3/99
Chloride	15000	500.		5000	EPA 300.0	mg/L	11/4/99
Fluoride	0.86	0.4		1	SM 4500-F C	mg/L	10/28/99
Hardness, Total (as CaCO ₃)	2300	1.		0.5	EPA 200.7	mg/L	10/26/99
Nitrate/Nitrite as N, Total	ND	0.05		1	SM 4500-NO ₃ F	mg/L-N	11/4/99
pH	7.09	2.		1	EPA 150.1	pH Units	10/22/99
pH Temperature	20.5	1.		1	EPA 150.1	°C	10/22/99
Specific Conductance	36400	1.		1	SM 2510 B	µS/cm	10/26/99
Sulfate	580	250.		500	EPA 300.0	mg/L	11/4/99
Total Dissolved Solids	17700	1500.		100	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA

CLIENT ID: M99-0187
 DATE SAMPLED: 10/19/99
 NEL SAMPLE ID: P9910092-06

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	REPORTING			METHOD	UNITS	ANALYZED
	RESULT	LIMIT	D. F.			
Alkalinity - Bicarbonate	780		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity, Total	780	25.	1	SM 2320 B	mg/L	10/29/99
Bromide	ND	4.	20	EPA 300.0	mg/L	11/3/99
Chloride	5500	500.	5000	EPA 300.0	mg/L	11/4/99
Fluoride	2.2	0.8	2	SM 4500-F C	mg/L	10/28/99
Hardness, Total (as CaCO ₃)	870	1.	0.5	EPA 200.7	mg/L	10/26/99
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO ₃ F	mg/L-N	11/4/99
pH	8.02	2.	1	EPA 150.1	pH Units	10/22/99
pH Temperature	20.6	1.	1	EPA 150.1	°C	10/22/99
Specific Conductance	14800	1.	1	SM 2510 B	µS/cm	10/26/99
Sulfate	210	50.	100	EPA 300.0	mg/L	11/4/99
Total Dissolved Solids	7800	150.	10	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
JECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991025TDS-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
JECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991027ALK-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	10/27/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	10/27/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	10/27/99
Alkalinity, Total	ND	25	1	SM 2320 B	mg/L	10/27/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
OBJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991028F-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/28/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
OBJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991029ALK-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity, Total	ND	25	1	SM 2320 B	mg/L	10/29/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
JECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 9911031C-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	11/3/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/3/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	11/3/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991104IC-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/4/99
Sulfate	ND	0.5	1	EPA 300.0	mg/L	11/4/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
JECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991104NO2NO3D-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	11/4/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
JECT #: NA

CLIENT ID: M99-0180
DATE SAMPLED: 10/18/99
NEL SAMPLE ID: P9910092-01

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 10/29/99

DILUTION: 1

ANALYZED: 10/29/99

PARAMETER	Result	Reporting Limit
Benzene	14 µg/L	2. µg/L
Toluene	31 µg/L	2. µg/L
Ethylbenzene	2.0 µg/L	2. µg/L
Total Xylenes	4.0 µg/L	4. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	104	86 - 115
Toluene-d8	106	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA

CLIENT ID: M99-0181
 DATE SAMPLED: 10/18/99
 NEL SAMPLE ID: P9910092-02

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 10/29/99

DILUTION: 1

ANALYZED: 10/29/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	17 P µg/L	2. µg/L
Toluene	42 P µg/L	2. µg/L
Ethylbenzene	8.1 P µg/L	2. µg/L
Total Xylenes	14 P µg/L	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	127 Sf	86 - 115
Toluene-d8	106	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
PROJECT #: NA

CLIENT ID: M99-0182
DATE SAMPLED: 10/18/99
NEL SAMPLE ID: P9910092-03

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
METHOD: EPA 8260B
MATRIX: Aqueous
DILUTION: 1

ANALYST: SKV - Las Vegas Division
EXTRACTED: 10/29/99
ANALYZED: 10/29/99

PARAMETER	Result	Reporting Limit
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	100	86 - 115
Toluene-d8	104	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA

CLIENT ID: M99-0184
 DATE SAMPLED: 10/19/99
 NEL SAMPLE ID: P9910092-04

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 10/29/99

DILUTION: 1

ANALYZED: 10/29/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	240 µg/L	2. µg/L
Toluene	160 µg/L	2. µg/L
Ethylbenzene	44 µg/L	2. µg/L
Total Xylenes	81 µg/L	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	121 Sf	86 - 115
Toluene-d8	96	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA

CLIENT ID: M99-0186
 DATE SAMPLED: 10/19/99
 NEL SAMPLE ID: P9910092-05

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 METHOD: EPA 8260B
 MATRIX: Aqueous
 DILUTION: 1

ANALYST: SKV - Las Vegas Division
 EXTRACTED: 10/29/99
 ANALYZED: 10/29/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	32 µg/L	2. µg/L
Toluene	6.2 µg/L	2. µg/L
Ethylbenzene	3.7 µg/L	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	103	86 - 115
Toluene-d8	106	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
OBJECT #: NA

CLIENT ID: M99-0187
DATE SAMPLED: 10/19/99
NEL SAMPLE ID: P9910092-06

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
METHOD: EPA 8260B
MATRIX: Aqueous
DILUTION: 1

ANALYST: SKV - Las Vegas Division
EXTRACTED: 10/29/99
ANALYZED: 10/29/99

PARAMETER	Result	Reporting Limit
Benzene	7.5 µg/L	2. µg/L
Toluene	3.6 µg/L	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	159 Sf	86 - 115
Toluene-d8	104	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991029BX60-BLK

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 10/29/99

ANALYZED: 10/29/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	88	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	991022PH-LCS	7	7.023	100	99 - 101	
7.00 Buffer	991022PH-LCSD	7	7.013	100	99 - 101	0.1

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
OBJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	991025TDS-LCS	1000	952	95	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
OBJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	991026COND2-LCS	1412	1400	99	95 - 105	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	991027ALK-LCS	125	124	99	85 - 115	
Alkalinity, Total	991027ALK-LCSD	125	120	96	85 - 115	3.3

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	991028F-LCS	1	1.07	107	85 - 115	
Fluoride	P9910040-11-MS	1	1.67	95	80 - 120	
Fluoride	P9910040-11-MSD	1	1.83	111	80 - 120	15.5

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	991029ALK-LCS	125	118	94	85 - 115	
Alkalinity, Total	991029ALK-LCSD	125	119	95	85 - 115	0.8

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA
 TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	991029BX60-LCS	20	21	105	80 - 120	
Benzene	P9910088-05-MS	20	23	115	76 - 127	
Benzene	P9910088-05-MSD	20	23	115	76 - 127	0.
Toluene	991029BX60-LCS	20	21	105	80 - 120	
Toluene	P9910088-05-MS	20	23	115	76 - 125	
Toluene	P9910088-05-MSD	20	22	110	76 - 125	4.4
Ethylbenzene	991029BX60-LCS	20	20	100	80 - 120	
Ethylbenzene	P9910088-05-MS	20	21	105	70 - 130	
Ethylbenzene	P9910088-05-MSD	20	21	105	70 - 130	0.
Total Xylenes	991029BX60-LCS	60	62	103	80 - 120	
Total Xylenes	P9910088-05-MS	60	64	107	70 - 130	
Total Xylenes	P9910088-05-MSD	60	63	105	70 - 130	1.6

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Drinking Water

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Bromide	991103IC-LCS	100	104	104	90 - 110	
Bromide	P9910089-01-MS	100	103	103	80 - 120	
Chloride	991103IC-LCS	100	102	102	90 - 110	
Chloride	991103IC-LCSD	100	102	102	90 - 110	0.
Chloride	P9910089-01-MS	100	133	101	80 - 120	
Sulfate	991103IC-LCS	100	104	104	90 - 110	
Sulfate	P9910089-01-MS	100	165	91	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	991104IC-LCS	100	102	102	90 - 110	
Chloride	991104IC-LCSD	100	101	101	90 - 110	1.
Chloride	P9910092-02-MS	100	7696	96	80 - 120	
Sulfate	991104IC-LCS	100	104	104	90 - 110	
Sulfate	991104IC-LCSD	100	102	102	90 - 110	1.9
Sulfate	P9910092-02-MS	100	117	92	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	991104NO2NO3D-LCS	0.5	0.5182	104	90 - 110	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Mercury	P10089-Hg-LCS	0.005	0.00501	100	85 - 115	
Mercury	P9910089-01-MS	0.005	0.00483	97	70 - 130	
Mercury	P9910089-01-MSD	0.005	0.00496	99	70 - 130	2.7

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Aluminum	P10092i-LCS	1	1.05	105	85 - 115	
Aluminum	P9910092-01-MS	1	1.08	104	75 - 125	
Aluminum	P9910092-01-MSD	1	1.06	102	75 - 125	1.9
Barium	P10092i-LCS	1	1.02	102	85 - 115	
Barium	P9910092-01-MS	1	1.04	99	75 - 125	
Barium	P9910092-01-MSD	1	1.03	98	75 - 125	1.
Boron	P10092i-LCS	1	1.02	102	85 - 115	
Boron	P9910092-01-MS	1	1.22	100	75 - 125	
Boron	P9910092-01-MSD	1	1.21	99	75 - 125	1.
Cadmium	P10092i-LCS	0.2	0.194	97	85 - 115	
Cadmium	P9910092-01-MS	0.2	0.193	97	75 - 125	
Cadmium	P9910092-01-MSD	0.2	0.193	97	75 - 125	0.
Calcium	P10092i-LCS	20	20.7	103	85 - 115	
Calcium	P9910092-01-MS	20	111	115	75 - 125	
Calcium	P9910092-01-MSD	20	109	105	75 - 125	9.1
Chromium	P10092i-LCS	0.5	0.501	100	85 - 115	
Chromium	P9910092-01-MS	0.5	0.487	97	75 - 125	
Chromium	P9910092-01-MSD	0.5	0.487	97	75 - 125	0.
Cobalt	P10092i-LCS	0.5	0.5	100	85 - 115	
Cobalt	P9910092-01-MS	0.5	0.485	97	75 - 125	
Cobalt	P9910092-01-MSD	0.5	0.484	97	75 - 125	0.2
Copper	P10092i-LCS	0.5	0.492	98	85 - 115	
Copper	P9910092-01-MS	0.5	0.492	98	75 - 125	
Copper	P9910092-01-MSD	0.5	0.487	97	75 - 125	1.
Iron	P10092i-LCS	1	1.03	103	85 - 115	
Iron	P9910092-01-MS	1	1.67	98	75 - 125	
Iron	P9910092-01-MSD	1	1.62	93	75 - 125	5.2
Magnesium	P10092i-LCS	20	20.3	102	85 - 115	
Magnesium	P9910092-01-MS	20	41.5	102	75 - 125	
Magnesium	P9910092-01-MSD	20	40.7	99	75 - 125	4.
Manganese	P10092i-LCS	0.5	0.497	99	85 - 115	
Manganese	P9910092-01-MS	0.5	0.532	96	75 - 125	
Manganese	P9910092-01-MSD	0.5	0.531	96	75 - 125	0.2
Molybdenum	P10092i-LCS	0.1	0.102	102	85 - 115	
Molybdenum	P9910092-01-MS	0.1	0.105	99	75 - 125	
Molybdenum	P9910092-01-MSD	0.1	0.105	99	75 - 125	0.
Nickel	P10092i-LCS	1	1.03	103	85 - 115	
Nickel	P9910092-01-MS	1	0.996	100	75 - 125	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nickel	P9910092-01-MSD	1	0.993	99	75 - 125	0.3
Potassium	P10072i-LCS	20	20.6	103	85 - 115	
Potassium	P9910092-01-MS	20	26	102	75 - 125	
Potassium	P9910092-01-MSD	20	25.7	101	75 - 125	1.5
Silver	P10092i-LCS	0.5	0.483	97	85 - 115	
Silver	P9910092-01-MS	0.5	0.481	96	75 - 125	
Silver	P9910092-01-MSD	0.5	0.479	96	75 - 125	0.4
Sodium	P10092i-LCS	20	20.8	104	85 - 115	
Sodium	P9910092-01-MS	20	114	110	75 - 125	
Sodium	P9910092-01-MSD	20	111	95	75 - 125	14.6
Zinc	P10092i-LCS	0.5	0.505	101	85 - 115	
Zinc	P9910092-01-MS	0.5	0.61	100	75 - 125	
Zinc	P9910092-01-MSD	0.5	0.608	100	75 - 125	0.4

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Arsenic	P10092M-LCS	0.01	0.011	110	85 - 115	
Arsenic	P9910092-01-MS	0.01	0.0159	83	75 - 125	
Arsenic	P9910092-01-MSD	0.01	0.0153	77	75 - 125	161.1
Lead	P10092M-LCS	0.005	0.00456	91	85 - 115	
Lead	P9910092-01-MS	0.05	0.0504	101	75 - 125	
Lead	P9910092-01-MSD	0.05	0.0504	101	75 - 125	0.
Selenium	P10092M-LCS	0.01	0.0108	108	85 - 115	
Selenium	P9910092-01-MS	0.01	0.01	100	75 - 125	
Selenium	P9910092-01-MSD	0.01	0.0102	102	75 - 125	2.

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL#4 Monitor Wells
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Uranium	P10092M-U-LCS	0.05	0.0471	94	85 - 115	
Uranium	P9910092-01-MS	0.05	0.0523	105	75 - 125	
Uranium	P9910092-01-MSD	0.05	0.0502	100	75 - 125	4.1

ND - Not Detected

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UV (F₂)

99910092

CHAIN OF CUSTODY RECORD

Due 10/29

Page _____ of _____

[illegible]

Vehicle - Tires (1 tire) - Pink - Field Sample

NEL LABORATORIES

Reno • Las Vegas
Phoenix • So. California

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

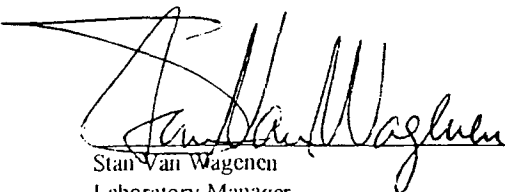
PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P9910091

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/22/99.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stan Van Wageningen
Laboratory Manager

11/5/99
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0183
DATE SAMPLED: 10/19/99
NEL SAMPLE ID: P9910091-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>	<u>D. F.</u>			
Chloride	9400	1000.	10000	EPA 300.0	mg/L	11/3/99
Specific Conductance	28900	1.	1	SM 2510 B	μS/cm	10/26/99
Total Dissolved Solids	16600	500.	20	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0185
DATE SAMPLED: 10/19/99
NEL SAMPLE ID: P9910091-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>	<u>D. F.</u>			
Chloride	6900	1000.	10000	EPA 300.0	mg/L	11/4/99
Specific Conductance	18900	1.	1	SM 2510 B	μS/cm	10/26/99
Total Dissolved Solids	9120	500.	20	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991025TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	25	1	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991103IC-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/3/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 9911041C-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/4/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	991025TDS-LCS	1000	952	95	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	991026COND2-LCS	1412	1400	99	95 - 105	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Drinking Water

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	991103IC-LCS	100	102	102	90 - 110	
Chloride	991103IC-LCSD	100	102	102	90 - 110	0.
Chloride	P9910089-01-MS	100	133	101	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	991104IC-LCS	100	102	102	90 - 110	
Chloride	991104IC-LCSD	100	101	101	90 - 110	1.
Chloride	P9910092-02-MS	100	7696	96	80 - 120	

ND - Not Detected

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CV 60-4 P 99100 91 Due 10/29

CHAIN OF CUSTODY RECORD

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PROJECT NUMBER		PROJECT NAME		CONTRACT LABORATORY	
SAMPLERS: (Signature)		DATE: 10/19/99			
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	
101979	0950		H ₂ O	M99-0183	
101979	1440		H ₂ O	M99-0185	
RELINQUISHED BY: (Signature) RECEIVED BY: (Signature) DATE/TIME 10/20/1300 DATE/TIME 10/22/1330 RECEIVED BY: (Signature) RECEIVED OF LABORATORY BY: (Signature)					
REQUESTED TURNAROUND TIME: ☒ ROUTINE ☐ RUSH CARRIER CO.					
RESULTS & INVOICES TO: LABORATORY SERVICES EL PASO NATURAL GAS COMPANY 8645 RAILROAD DRIVE EL PASO, TEXAS 79904 915-759-2229 FAX: 915-759-2335					

NEL LABORATORIES

Reno • Las Vegas
Phoenix • So. California

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

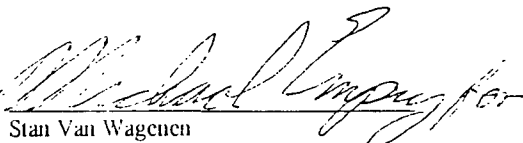
PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P9910090

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/22/99.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stan Van Wageningen
Laboratory Manager

11/4/99
Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0188
DATE SAMPLED: 10/20/99
NEL SAMPLE ID: P9910090-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>REPORTING</u>			<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
	<u>RESULT</u>	<u>LIMIT</u>	<u>D. F.</u>			
Chloride	4100	200.	2000	EPA 300.0	mg/L	11/3/99
Specific Conductance	12400	1.	1	SM 2510 B	µS/cm	10/26/99
Total Dissolved Solids	6290	250.	10	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M99-0189
DATE SAMPLED: 10/20/99
NEL SAMPLE ID: P9910090-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>					
Chloride	600	25.		250	EPA 300.0	mg/L	11/3/99
Specific Conductance	2390	1.		1	SM 2510 B	μS/cm	10/26/99
Total Dissolved Solids	1630	50.		2	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0190
DATE SAMPLED: 10/20/99
NEL SAMPLE ID: P9910090-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>	<u>D. F.</u>			
Chloride	590	25.	250	EPA 300.0	mg/L	11/3/99
Specific Conductance	2390	1.	1	SM 2510 B	μS/cm	10/26/99
Total Dissolved Solids	1560	50.	2	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0191
DATE SAMPLED: 10/20/99
NEL SAMPLE ID: P9910090-04

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
		<u>LIMIT</u>	<u>D. F.</u>			
Chloride	460	25.	250	EPA 300.0	mg/L	11/3/99
Specific Conductance	2300	1.	1	SM 2510 B	µS/cm	10/26/99
Total Dissolved Solids	1630	50.	2	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991025TDS-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	25	1	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991103IC-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/3/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	991025TDS-LCS	1000	952	95	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	991026COND2-LCS	1412	1400	99	95 - 105	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Drinking Water

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	991103IC-LCS	100	102	102	90 - 110	
Chloride	991103IC-LCSD	100	102	102	90 - 110	0.
Chloride	P9910089-01-MS	100	133	101	80 - 120	

ND - Not Detected

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17. 24. 1942

10/29

CHAIN OF CUSTODY RECORD

06001667

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[illegible]

White - Testing Laboratory Canary - FPNGLab Pink - Field Sampler

Author's address: Department of Mathematics, University of California at Berkeley, 94720-1550, CA, U.S.A.

NEL LABORATORIES

Reno • Las Vegas
Phoenix • So California

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P9910088

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/22/99.

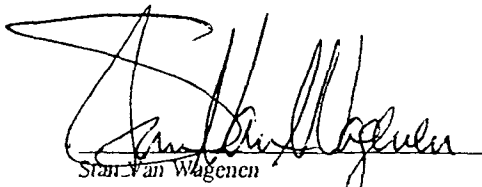
Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some results have been flagged as follows:

- P - Sample was received with a pH greater than 2.
- RL - Reporting limit raised due to sample matrix interference.

Some QA results have been flagged as follows:

- C - Sample concentration is a least 5 times greater than spike contribution. Spike recovery criteria do not apply.


Stan Van Wageningen
Laboratory Manager

11/18/99
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0192
DATE SAMPLED: 10/20/99
NEL SAMPLE ID: P9910088-01

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.096	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Arsenic	0.0088	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Barium	0.42	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	0.30	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	1100	1.25 mg/L	2.5	EPA 200.7	10/25/99	10/26/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	0.0039	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	0.68	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Magnesium	280	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	0.17	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99
Molybdenum	0.0045	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	27	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Silica	19	1. mg/L	1	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	2300	1.25 mg/L	2.5	EPA 200.7	10/25/99	10/26/99
Uranium	0.013	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0194
 DATE SAMPLED: 10/21/99
 NEL SAMPLE ID: P9910088-02

TEST: AZ METALS PKG
 MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.11	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Arsenic	0.091	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Barium	1.2	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	0.79	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	270	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	14	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Magnesium	93	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	0.13	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99
Molybdenum	0.025	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	3.8	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Silica	23	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	3300	2.5 mg/L	5	EPA 200.7	10/25/99	10/26/99
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

DF - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0195
DATE SAMPLED: 10/21/99
NEL SAMPLE ID: P9910088-03

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.083	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Arsenic	1.7	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Barium	0.35	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	1.3	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	0.0061	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	69	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Chromium	0.0045	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	0.0084	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	2.2	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Magnesium	19	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	0.087	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99
Molybdenum	0.080	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	0.030	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	2.3	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Na	29	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	2900	2.5 mg/L	5	EPA 200.7	10/25/99	10/26/99
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0196
DATE SAMPLED: 10/21/99
NEL SAMPLE ID: P9910088-04

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.094	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Arsenic	0.0061	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Barium	0.034	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	1.1	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	190	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Chromium	0.019	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	0.15	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Magnesium	24	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	0.011	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	6.3	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Silver	26	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Copper	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	540	1.25 mg/L	2.5	EPA 200.7	10/25/99	10/26/99
Uranium	0.0055	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Zinc	0.81	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0197
DATE SAMPLED: 10/21/99
NEL SAMPLE ID: P9910088-05

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.078	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Arsenic	0.013	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Barium	0.046	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	0.24	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	48	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	0.21	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Magnesium	18	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	0.012	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	5.8	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Silica	21	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	98	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Uranium	0.0062	0.005 mg/L	5	EPA 200.8	10/25/99	10/27/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: P10088i-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Aluminum	ND	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Barium	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	ND	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10088M-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Arsenic	ND	0.001 mg/L	1	EPA 200.8	10/25/99	10/27/99
Lead	ND	0.001 mg/L	1	EPA 200.8	10/25/99	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10088M-U-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.001 mg/L	1	EPA 200.8	10/25/99	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10089-Hg-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10092Si-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	10. mg/L	10	SM 4500Si-D	NA	11/9/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0192
 DATE SAMPLED: 10/20/99
 NEL SAMPLE ID: P9910088-01

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	REPORTING		D. F.	METHOD	UNITS	ANALYZED
	RESULT	LIMIT				
Alkalinity - Bicarbonate	140		1	SiM 2320 B	mg/L	10/29/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity, Total	140	25.	1	SM 2320 B	mg/L	10/29/99
Bromide	ND	4.	20	EPA 300.0	mg/L	11/3/99
Chloride	7800	250.	2500	EPA 300.0	mg/L	11/4/99
Fluoride	0.60	0.4	1	SM 4500-F C	mg/L	10/28/99
Hardness, Total (as CaCO3)	3900	1.	0.5	EPA 200.7	mg/L	10/26/99
Nitrate/Nitrite as N, Total	0.055	0.05	1	SM 4500-NO3 F	mg/L-N	11/4/99
pH	6.94	2.	1	EPA 150.1	pH Units	10/22/99
pH Temperature	19.1	1.	1	EPA 150.1	°C	10/22/99
Specific Conductance	19300	1.	1	SM 2510 B	µS/cm	10/26/99
Sulfate	340	50.	100	EPA 300.0	mg/L	11/4/99
Total Dissolved Solids	13600	300.	20	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0194
DATE SAMPLED: 10/21/99
NEL SAMPLE ID: P9910088-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	REPORTING			METHOD	UNITS	ANALYZED
	RESULT	LIMIT	D. F.			
Alkalinity - Bicarbonate	870		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity, Total	870	25.	1	SM 2320 B	mg/L	10/29/99
Bromide	ND	4.	20	EPA 300.0	mg/L	11/3/99
Chloride	4800	200.	2000	EPA 300.0	mg/L	11/4/99
Fluoride	3.4	0.8	2	SM 4500-F C	mg/L	10/28/99
Hardness, Total (as CaCO ₃)	1000	1.	0.5	EPA 200.7	mg/L	10/26/99
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO ₃ F	mg/L-N	11/4/99
pH	7.05	2.	1	EPA 150.1	pH Units	10/22/99
pH Temperature	18.7	1.	1	EPA 150.1	°C	10/22/99
Specific Conductance	14700	1.	1	SM 2510 B	µS/cm	10/26/99
Sulfate	160	10.	20	EPA 300.0	mg/L	11/3/99
Total Dissolved Solids	8010	150.	10	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0195
DATE SAMPLED: 10/21/99
NEL SAMPLE ID: P9910088-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		METHOD	UNITS	ANALYZED
		LIMIT	D. F.			
Alkalinity - Bicarbonate	1400		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Carbonate	130		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity, Total	1500	25.	1	SM 2320 B	mg/L	10/29/99
Bromide	ND	4.	20	EPA 300.0	mg/L	11/3/99
Chloride	2800	200.	2000	EPA 300.0	mg/L	11/4/99
Fluoride	28	8.	20	SM 4500-F C	mg/L	10/28/99
Hardness, Total (as CaCO3)	250	1.	0.5	EPA 200.7	mg/L	10/26/99
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	11/4/99
pH	8.54	2.	1	EPA 150.1	pH Units	10/22/99
pH Temperature	19.1	1.	1	EPA 150.1	°C	10/22/99
Specific Conductance	11500	1.	1	SM 2510 B	μS/cm	10/26/99
Sulfate	230	50.	100	EPA 300.0	mg/L	11/4/99
Total Dissolved Solids	6170	150.	10	SM 2540 C	mg/L	10/25/99

D.F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0196
 DATE SAMPLED: 10/21/99
 NEL SAMPLE ID: P9910088-04

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		METHOD	UNITS	ANALYZED
		LIMIT	D. F.			
Alkalinity - Bicarbonate	270		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity, Total	270	25.	1	SM 2320 B	mg/L	10/29/99
Bromide	ND	2.	10	EPA 300.0	mg/L	11/3/99
Chloride	1000	25.	250	EPA 300.0	mg/L	11/4/99
Fluoride	0.77	0.4	1	SM 4500-F C	mg/L	10/28/99
Hardness, Total (as CaCO ₃)	560	1.	0.5	EPA 200.7	mg/L	10/26/99
Nitrate/Nitrite as N, Total	6.5	1.25	25	SM 4500-NO ₃ F	mg/L-N	11/4/99
pH	7.23	2.	1	EPA 150.1	pH Units	10/22/99
pH Temperature	18.5	1.	1	EPA 150.1	°C	10/22/99
Specific Conductance	3250	1.	1	SM 2510 B	µS/cm	10/26/99
Sulfate	440	50.	100	EPA 300.0	mg/L	11/3/99
Total Dissolved Solids	1890	30.	2	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA

CLIENT ID: M99-0197
 DATE SAMPLED: 10/21/99
 NEL SAMPLE ID: P9910088-05

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	170			1	SM 2320 B	mg/L	10/29/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	10/29/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	10/29/99
Alkalinity, Total	170	25.		1	SM 2320 B	mg/L	10/29/99
Bromide	0.37	0.2		1	EPA 300.0	mg/L	11/3/99
Chloride	68	5.		50	EPA 300.0	mg/L	11/3/99
Fluoride	1.8	0.4		1	SM 4500-F C	mg/L	10/28/99
Hardness, Total (as CaCO3)	200	1.		0.5	EPA 200.7	mg/L	10/26/99
Nitrate/Nitrite as N, Total	2.0	0.5		10	SM 4500-NO3 F	mg/L-N	11/4/99
pH	7.79	2.		1	EPA 150.1	pH Units	10/22/99
pH Temperature	20.4	1.		1	EPA 150.1	°C	10/22/99
Specific Conductance	753	1.		1	SM 2510 B	μS/cm	10/26/99
Sulfate	100	25.		50	EPA 300.0	mg/L	11/3/99
Total Dissolved Solids	469	15.		1	SM 2540 C	mg/L	10/25/99

D.F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991025TDS-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991028F-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/28/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Non-Metals

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 991029ALK-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity, Total	ND	25	1	SM 2320 B	mg/L	10/29/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company

CLIENT ID: Method Blank

PROJECT ID: JAL #4

DATE SAMPLED: NA

OBJECT #: NA

NEL SAMPLE ID: 991103IC-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	11/3/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/3/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	11/3/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991104IC-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/4/99
Sulfate	ND	0.5	1	EPA 300.0	mg/L	11/4/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991104NO2NO3-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	11/4/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991104NO2NO3D-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	11/4/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0192
 DATE SAMPLED: 10/20/99
 NEL SAMPLE ID: P9910088-01

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 10/29/99

DILUTION: 1

ANALYZED: 10/29/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	14 µg/L	2. µg/L
Toluene	4.5 µg/L	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	95	86 - 115
Toluene-d8	103	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0194
 DATE SAMPLED: 10/21/99
 NEL SAMPLE ID: P9910088-02

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 10/29/99

DILUTION: 1

ANALYZED: 10/29/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	7.2 µg/L	2. µg/L
Toluene	5.3 µg/L	2. µg/L
Ethylbenzene	2.4 µg/L	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	102	86 - 115
Toluene-d8	106	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0195
DATE SAMPLED: 10/21/99
NEL SAMPLE ID: P9910088-03

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 10/29/99

DILUTION: 10

ANALYZED: 10/29/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND P	20. µg/L
Toluene	ND RI	20. µg/L
Ethylbenzene	ND RI	20. µg/L
Total Xylenes	ND RI	40. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	99	86 - 115
Toluene-d8	105	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA

CLIENT ID: M99-0196
 DATE SAMPLED: 10/21/99
 NEL SAMPLE ID: P9910088-04

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 10/29/99

DILUTION: 1

ANALYZED: 10/29/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	2.7 µg/L	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	101	86 - 115
Toluene-d8	104	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0197
DATE SAMPLED: 10/21/99
NEL SAMPLE ID: P9910088-05

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
METHOD: EPA 8260B
MATRIX: Aqueous
DILUTION: 1

ANALYST: SKV - Las Vegas Division
EXTRACTED: 10/29/99
ANALYZED: 10/29/99

PARAMETER	Result	Reporting Limit
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	95	86 - 115
Toluene- α 8	103	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991029BX60-BLK

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 10/29/99

ANALYZED: 10/29/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	88	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	991022PH-LCS	7	7.023	100	99 - 101	
7.00 Buffer	991022PH-LCSD	7	7.013	100	99 - 101	0.1

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	991025TDS-LCS	1000	952	95	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	991026COND2-LCS	1412	1400	99	95 - 105	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	991028F-LCS	1	1.07	107	85 - 115	
Fluoride	P9910040-11-MS	1	1.67	95	80 - 120	
Fluoride	P9910040-11-MSD	1	1.83	111	80 - 120	15.5

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	991029ALK-LCS	125	118	94	85 - 115	
Alkalinity, Total	991029ALK-LCSD	125	119	95	85 - 115	0.8

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	991029BX60-LCS	20	21	105	80 - 120	
Benzene	P9910088-05-MS	20	23	115	76 - 127	
Benzene	P9910088-05-MSD	20	23	115	76 - 127	0.
Toluene	991029BX60-LCS	20	21	105	80 - 120	
Toluene	P9910088-05-MS	20	23	115	76 - 125	
Toluene	P9910088-05-MSD	20	22	110	76 - 125	4.4
Ethylbenzene	991029BX60-LCS	20	20	100	80 - 120	
Ethylbenzene	P9910088-05-MS	20	21	105	70 - 130	
Ethylbenzene	P9910088-05-MSD	20	21	105	70 - 130	0.
Total Xylenes	991029BX60-LCS	60	62	103	80 - 120	
Total Xylenes	P9910088-05-MS	60	64	107	70 - 130	
Total Xylenes	P9910088-05-MSD	60	63	105	70 - 130	1.6

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Drinking Water

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Bromide	991103IC-LCS	100	104	104	90 - 110	
Bromide	P9910089-01-MS	100	103	103	80 - 120	
Chloride	991103IC-LCS	100	102	102	90 - 110	
Chloride	991103IC-LCSD	100	102	102	90 - 110	0.
Chloride	P9910089-01-MS	100	133	101	80 - 120	
Sulfate	991103IC-LCS	100	104	104	90 - 110	
Sulfate	P9910089-01-MS	100	165	91	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	991104IC-LCS	100	102	102	90 - 110	
Chloride	991104IC-LCSD	100	101	101	90 - 110	1.
Chloride	P9910092-02-MS	100	7696	96	80 - 120	
Sulfate	991104IC-LCS	100	104	104	90 - 110	
Sulfate	991104IC-LCSD	100	102	102	90 - 110	1.9
Sulfate	P9910092-02-MS	100	117	92	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	991104NO2NO3-LCS	0.5	0.5098	102	90 - 110	
Nitrate/Nitrite as N, Total	R9910099-01-MS	1	0.967	97	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	991104NO2NO3D-LCS	0.5	0.5182	104	90 - 110	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Aluminum	P10088i-LCS	1	1.04	104	85 - 115	
Aluminum	P9910088-01-MS	1	1.26	116	75 - 125	
Aluminum	P9910088-01-MSD	1	1.22	112	75 - 125	3.5
Barium	P10088i-LCS	1	0.973	97	85 - 115	
Barium	P9910088-01-MS	1	1.31	89	75 - 125	
Barium	P9910088-01-MSD	1	1.31	89	75 - 125	0.
Boron	P10088i-LCS	1	0.985	99	85 - 115	
Boron	P9910088-01-MS	1	1.33	103	75 - 125	
Boron	P9910088-01-MSD	1	1.31	101	75 - 125	2.
Cadmium	P10088i-LCS	0.2	0.192	96	85 - 115	
Cadmium	P9910088-01-MS	0.2	0.243	121	75 - 125	
Cadmium	P9910088-01-MSD	0.2	0.24	120	75 - 125	1.2
Calcium	P10088i-LCS	20	20.7	103	85 - 115	
Calcium	P9910088-01-MS	50	1030	-140 C	75 - 125	
Calcium	P9910088-01-MSD	50	1060	-80 C	75 - 125	-54.5
Chromium	P10088i-LCS	0.5	0.494	99	85 - 115	
Chromium	P9910088-01-MS	0.5	0.493	99	75 - 125	
Chromium	P9910088-01-MSD	0.5	0.49	98	75 - 125	0.6
Cobalt	P10088i-LCS	0.5	0.494	99	85 - 115	
Cobalt	P9910088-01-MS	0.5	0.491	98	75 - 125	
Cobalt	P9910088-01-MSD	0.5	0.489	98	75 - 125	0.4
Copper	P10088i-LCS	0.5	0.47	94	85 - 115	
Copper	P9910088-01-MS	0.5	0.528	105	75 - 125	
Copper	P9910088-01-MSD	0.5	0.519	103	75 - 125	1.7
Iron	P10088i-LCS	1	0.996	100	85 - 115	
Iron	P9910088-01-MS	1	1.64	96	75 - 125	
Iron	P9910088-01-MSD	1	1.61	93	75 - 125	3.2
Magnesium	P10088i-LCS	20	19.7	99	85 - 115	
Magnesium	P9910088-01-MS	50	340	120	75 - 125	
Magnesium	P9910088-01-MSD	50	341	122	75 - 125	1.7
Manganese	P10088i-LCS	0.5	0.489	98	85 - 115	
Manganese	P9910088-01-MS	0.5	0.655	97	75 - 125	
Manganese	P9910088-01-MSD	0.5	0.653	97	75 - 125	0.4
Molybdenum	P10088i-LCS	0.1	0.0992	99	85 - 115	
Molybdenum	P9910088-01-MS	0.1	0.107	102	75 - 125	
Molybdenum	P9910088-01-MSD	0.1	0.106	101	75 - 125	1.
Nickel	P10088i-LCS	1	1.02	102	85 - 115	
Nickel	P9910088-01-MS	1	0.999	100	75 - 125	

ND - Not Detected

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LABORATORIES

Paso Natural Gas Company

#4

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<u>ble</u>	<u>RPD</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
5		P9910088-01-MSD	1	0.999	100	75 - 125	0.
5		P10088i-LCS	20	19.8	99	85 - 115	
5	0.9	P9910088-01-MS	50	73.3	93	75 - 125	
5		P9910088-01-MSD	50	73.9	94	75 - 125	1.3
5		P10088i-LCS	0.5	0.476	95	85 - 115	
5	0.	P9910088-01-MS	0.5	0.57	114	75 - 125	
5		P9910088-01-MSD	0.5	0.563	113	75 - 125	1.2
5		P10088i-LCS	20	19.6	98	85 - 115	
5	2.6	P9910088-01-MS	50	2240	-120 C	75 - 125	
		P9910088-01-MSD	50	2200	-200 C	75 - 125	-50.
		P10088i-LCS	0.5	0.498	100	85 - 115	
		P9910088-01-MS	0.5	0.586	117	75 - 125	
		P9910088-01-MSD	0.5	0.586	117	75 - 125	0.

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Arsenic	P10088M-LCS	0.01	0.00948	95	85 - 115	
Arsenic	P9910088-01-MS	0.1	0.125	116	75 - 125	
Arsenic	P9910088-01-MSD	0.1	0.126	117	75 - 125	0.9
Lead	P10088M-LCS	0.005	0.00531	106	85 - 115	
Lead	P9910088-01-MS	0.05	0.045	90	75 - 125	
Lead	P9910088-01-MSD	0.05	0.045	90	75 - 125	0.
Selenium	P10088M-LCS	0.01	0.0103	103	85 - 115	
Selenium	P9910088-01-MS	0.1	0.115	115	75 - 125	
Selenium	P9910088-01-MSD	0.1	0.118	118	75 - 125	2.6

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Uranium	P10088M-U-LCS	0.05	0.0534	107	85 - 115	
Uranium	P9910088-01-MS	0.05	0.0614	97	75 - 125	
Uranium	P9910088-01-MSD	0.05	0.0631	100	75 - 125	3.5

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Mercury	P10089-Hg-LCS	0.005	0.00501	100	85 - 115	
Mercury	P9910089-01-MS	0.005	0.00483	97	70 - 130	
Mercury	P9910089-01-MSD	0.005	0.00496	99	70 - 130	2.7

ND - Not Detected

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White - Testing Laboratory Canary - EPNG Lab Pink - Field Sampler

NEL LABORATORIES

Reno • Las Vegas
Phoenix • So. California

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P9910089

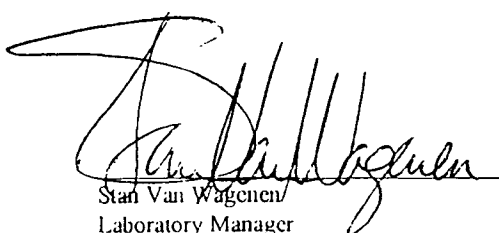
Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/22/99.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some QA results have been flagged as follows:

- C - Sample concentration is a least 5 times greater than spike contribution. Spike recovery criteria do not apply.


Stan Van Wageningen
Laboratory Manager

11/18/99
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0193
 DATE SAMPLED: 10/21/99
 NEL SAMPLE ID: P9910089-01

TEST: AZ METALS PKG
 MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.042	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Arsenic	0.0096	0.001 mg/L	1	EPA 200.8	10/25/99	10/27/99
Barium	0.047	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	0.23	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	51	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	0.0021	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	0.16	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Lead	ND	0.001 mg/L	1	EPA 200.8	10/25/99	10/27/99
Magnesium	18	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	0.0093	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99
Molybdenum	0.0048	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	4.7	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Ca	24	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	77	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Uranium	0.0055	0.001 mg/L	1	EPA 200.8	10/25/99	10/27/99
Zinc	0.11	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

D.F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company

CLIENT ID: Method Blank

PROJECT ID: JAL #4

DATE SAMPLED: NA

OBJECT #: NA

NEL SAMPLE ID: P10088i-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Aluminum	ND	0.025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Barium	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Boron	ND	0.01 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	10/25/99	10/26/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10088M-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Arsenic	ND	0.001 mg/L	1	EPA 200.8	10/25/99	10/27/99
Lead	ND	0.001 mg/L	1	EPA 200.8	10/25/99	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company

PROJECT ID: JAL #4

OBJECT #: NA

TEST: Metals

CLIENT ID: Method Blank

DATE SAMPLED: NA

NEL SAMPLE ID: P10088M-U-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.001 mg/L	1	EPA 200.8	10/25/99	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10089-Hg-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/25/99	10/26/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10092Si-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	10. mg/L	10	SM 4500Si-D	NA	11/9/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0193
 DATE SAMPLED: 10/21/99
 NEL SAMPLE ID: P9910089-01

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	180			1	SM 2320 B	mg/L	10/29/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	10/29/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	10/29/99
Alkalinity, Total	180	25.		1	SM 2320 B	mg/L	10/29/99
Bromide	0.29	0.2		1	EPA 300.0	mg/L	11/3/99
Chloride	32	5.		50	EPA 300.0	mg/L	11/3/99
Fluoride	0.86	0.4		1	SM 4500-F C	mg/L	10/26/99
Hardness, Total (as CaCO3)	200	1.		0.5	EPA 200.7	mg/L	10/26/99
Nitrate/Nitrite as N, Total	1.1	0.05		1	SM 4500-NO3 F	mg/L-N	11/4/99
pH	7.74	2.		1	EPA 150.1	pH Units	10/22/99
pH Temperature	19.2	1.		1	EPA 150.1	°C	10/22/99
Specific Conductance	617	1.		1	SM 2510 B	µS/cm	10/26/99
Sulfate	74	25.		50	EPA 300.0	mg/L	11/3/99
Total Dissolved Solids	400	15.		1	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991025TDS-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/25/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991026F2-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/26/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991029ALK-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	10/29/99
Alkalinity, Total	ND	25	1	SM 2320 B	mg/L	10/29/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company

CLIENT ID: Method Blank

PROJECT ID: JAL #4

DATE SAMPLED: NA

OBJECT #: NA

NEL SAMPLE ID: 991103IC-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	11/3/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/3/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	11/3/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company

CLIENT ID: Method Blank

PROJECT ID: JAL #4

DATE SAMPLED: NA

OBJECT #: NA

NEL SAMPLE ID: 991104NO2NO3-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	11/4/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0193
DATE SAMPLED: 10/21/99
NEL SAMPLE ID: P9910089-01

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: BJV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 10/28/99

DILUTION: 1

ANALYZED: 10/28/99

PARAMETER	Result	Reporting Limit
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	97	86 - 115
Toluene-d8	104	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991028BX60-BLK

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
METHOD: EPA 8260B
MATRIX: Aqueous
ANALYST: BJV - Las Vegas Division
EXTRACTED: 10/28/99
ANALYZED: 10/28/99

PARAMETER	Result	Reporting Limit
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	102	86 - 115
Toluene-d8	104	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	991022PH-LCS	7	7.023	100	99 - 101	
7.00 Buffer	991022PH-LCSD	7	7.013	100	99 - 101	0.1

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	991025TDS-LCS	1000	952	95	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	991026COND2-LCS	1412	1400	99	95 - 105	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	991026F2-LCS	1	1	100	85 - 115	
Fluoride	991026F2-LCSD	1	0.91	91	85 - 115	9.4
Fluoride	L9910121-01-MS	1	1.54	96	80 - 120	
Fluoride	L9910121-01-MSD	1	1.57	99	80 - 120	3.1

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	991028BX60-LCS	20	21.27	106	80 - 120	
Benzene	L9910217-03-MS	20	21	105	76 - 127	
Benzene	L9910217-03-MSD	20	19	95	76 - 127	10.
Toluene	991028BX60-LCS	20	20.79	104	80 - 120	
Toluene	L9910217-03-MS	20	20	100	76 - 125	
Toluene	L9910217-03-MSD	20	18	90	76 - 125	10.5
Ethylbenzene	991028BX60-LCS	20	19.96	100	80 - 120	
Ethylbenzene	L9910217-03-MS	20	20	100	70 - 130	
Ethylbenzene	L9910217-03-MSD	20	18	90	70 - 130	10.5
Total Xylenes	991028BX60-LCS	60	60.41	101	80 - 120	
Total Xylenes	L9910217-03-MS	60	61	102	70 - 130	
Total Xylenes	L9910217-03-MSD	60	54	90	70 - 130	12.2

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	991029ALK-LCS	125	118	94	85 - 115	
Alkalinity, Total	991029ALK-LCSD	125	119	95	85 - 115	0.8

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 SUBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Drinking Water

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Bromide	991103IC-LCS	100	104	104	90 - 110	
Bromide	P9910089-01-MS	100	103	103	80 - 120	
Chloride	991103IC-LCS	100	102	102	90 - 110	
Chloride	991103IC-LCSD	100	102	102	90 - 110	0.
Chloride	P9910089-01-MS	100	133	101	80 - 120	
Sulfate	991103IC-LCS	100	104	104	90 - 110	
Sulfate	P9910089-01-MS	100	165	91	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	991104NO2NO3-LCS	0.5	0.5098	102	90 - 110	
Nitrate/Nitrite as N, Total	R9910099-01-MS	1	0.967	97	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Aluminum	P10088i-LCS	1	1.04	104	85 - 115	
Aluminum	P9910088-01-MS	1	1.26	116	75 - 125	
Aluminum	P9910088-01-MSD	1	1.22	112	75 - 125	3.5
Barium	P10088i-LCS	1	0.973	97	85 - 115	
Barium	P9910088-01-MS	1	1.31	89	75 - 125	
Barium	P9910088-01-MSD	1	1.31	89	75 - 125	0.
Boron	P10088i-LCS	1	0.985	99	85 - 115	
Boron	P9910088-01-MS	1	1.33	103	75 - 125	
Boron	P9910088-01-MSD	1	1.31	101	75 - 125	2.
Cadmium	P10088i-LCS	0.2	0.192	96	85 - 115	
Cadmium	P9910088-01-MS	0.2	0.243	121	75 - 125	
Cadmium	P9910088-01-MSD	0.2	0.24	120	75 - 125	1.2
Calcium	P10088i-LCS	20	20.7	103	85 - 115	
Calcium	P9910088-01-MS	50	1030	-140 C	75 - 125	
Calcium	P9910088-01-MSD	50	1060	-80 C	75 - 125	-54.5
Chromium	P10088i-LCS	0.5	0.494	99	85 - 115	
Chromium	P9910088-01-MS	0.5	0.493	99	75 - 125	
Chromium	P9910088-01-MSD	0.5	0.49	98	75 - 125	0.6
Cobalt	P10088i-LCS	0.5	0.494	99	85 - 115	
Cobalt	P9910088-01-MS	0.5	0.491	98	75 - 125	
Cobalt	P9910088-01-MSD	0.5	0.489	98	75 - 125	0.4
Copper	P10088i-LCS	0.5	0.47	94	85 - 115	
Copper	P9910088-01-MS	0.5	0.528	105	75 - 125	
Copper	P9910088-01-MSD	0.5	0.519	103	75 - 125	1.7
Iron	P10088i-LCS	1	0.996	100	85 - 115	
Iron	P9910088-01-MS	1	1.64	96	75 - 125	
Iron	P9910088-01-MSD	1	1.61	93	75 - 125	3.2
Magnesium	P10088i-LCS	20	19.7	99	85 - 115	
Magnesium	P9910088-01-MS	50	340	120	75 - 125	
Magnesium	P9910088-01-MSD	50	341	122	75 - 125	1.7
Manganese	P10088i-LCS	0.5	0.489	98	85 - 115	
Manganese	P9910088-01-MS	0.5	0.655	97	75 - 125	
Manganese	P9910088-01-MSD	0.5	0.653	97	75 - 125	0.4
Molybdenum	P10088i-LCS	0.1	0.0992	99	85 - 115	
Molybdenum	P9910088-01-MS	0.1	0.107	102	75 - 125	
Molybdenum	P9910088-01-MSD	0.1	0.106	101	75 - 125	1.
Nickel	P10088i-LCS	1	1.02	102	85 - 115	
Nickel	P9910088-01-MS	1	0.999	100	75 - 125	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nickel	P9910088-01-MSD	1	0.999	100	75 - 125	0.
Potassium	P10088i-LCS	20	19.8	99	85 - 115	
Potassium	P9910088-01-MS	50	73.3	93	75 - 125	
Potassium	P9910088-01-MSD	50	73.9	94	75 - 125	1.3
Silver	P10088i-LCS	0.5	0.476	95	85 - 115	
Silver	P9910088-01-MS	0.5	0.57	114	75 - 125	
Silver	P9910088-01-MSD	0.5	0.563	113	75 - 125	1.2
Sodium	P10088i-LCS	20	19.6	98	85 - 115	
Sodium	P9910088-01-MS	50	2240	-120 C	75 - 125	
Sodium	P9910088-01-MSD	50	2200	-200 C	75 - 125	-50.
Zinc	P10088i-LCS	0.5	0.498	100	85 - 115	
Zinc	P9910088-01-MS	0.5	0.586	117	75 - 125	
Zinc	P9910088-01-MSD	0.5	0.586	117	75 - 125	0.

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Arsenic	P10088M-LCS	0.01	0.00948	95	85 - 115	
Arsenic	P9910088-01-MS	0.1	0.125	116	75 - 125	
Arsenic	P9910088-01-MSD	0.1	0.126	117	75 - 125	0.9
Lead	P10088M-LCS	0.005	0.00531	106	85 - 115	
Lead	P9910088-01-MS	0.05	0.045	90	75 - 125	
Lead	P9910088-01-MSD	0.05	0.045	90	75 - 125	0.
Selenium	P10088M-LCS	0.01	0.0103	103	85 - 115	
Selenium	P9910088-01-MS	0.1	0.115	115	75 - 125	
Selenium	P9910088-01-MSD	0.1	0.118	118	75 - 125	2.6

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Uranium	P10088M-U-LCS	0.05	0.0534	107	85 - 115	
Uranium	P9910088-01-MS	0.05	0.0614	97	75 - 125	
Uranium	P9910088-01-MSD	0.05	0.0631	100	75 - 125	3.5

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Mercury	P10089-Hg-LCS	0.005	0.00501	100	85 - 115	
Mercury	P9910089-01-MS	0.005	0.00483	97	70 - 130	
Mercury	P9910089-01-MSD	0.005	0.00496	99	70 - 130	2.7

ND - Not Detected

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CHAIN OF CUSTODY RECORD

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NEL LABORATORIES

Reno • Las Vegas
Phoenix • So. California

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P9910094

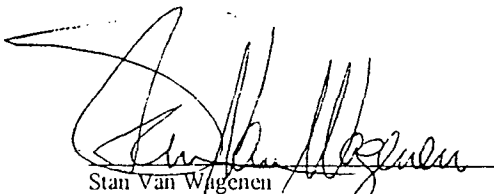
Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/23/99.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some QA results have been flagged as follows:

- C - Sample concentration is a least 5 times greater than spike contribution. Spike recovery criteria do not apply.
- II - The batch MS and/or MSD were outside acceptance limits. The batch LCS was acceptable.


Stan Van Wagoner
Laboratory Manager

11/19/99
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California		Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605	Idaho	Certified	Certified	
California	1707	2002	2264	Montana	Certified	Certified	
US Army Corps of Engineers	Certified	Certified		Nevada	NV033	NV052	CA084
				L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 SUBJECT #: NA

CLIENT ID: M99-0198
 DATE SAMPLED: 10/22/99
 NEL SAMPLE ID: P9910094-01

TEST: AZ METALS PKG
 MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Arsenic	ND	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Barium	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Boron	ND	0.01 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Calcium	0.32	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/27/99	10/27/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Ca	ND	1. mg/L	1	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0199
DATE SAMPLED: 10/22/99
NEL SAMPLE ID: P9910094-02

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Aluminum	0.030	0.025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Arsenic	0.0066	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Barium	0.13	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Boron	0.43	0.01 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Calcium	820	2.5 mg/L	5	EPA 200.7	10/27/99	10/28/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Iron	0.96	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Magnesium	230	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Manganese	0.80	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/27/99	10/27/99
Molybdenum	0.0062	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Potassium	22	1. mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Ca	29	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Sodium	990	2.5 mg/L	5	EPA 200.7	10/27/99	10/28/99
Uranium	0.032	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0200
DATE SAMPLED: 10/22/99
NEL SAMPLE ID: P9910094-03

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.033	0.025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Arsenic	0.0066	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Barium	0.075	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Boron	0.20	0.01 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Calcium	44	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Iron	0.72	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Magnesium	12	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Manganese	0.051	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/27/99	10/27/99
Molybdenum	0.0069	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Potassium	4.3	1. mg/L	0.5	EPA 200.7	10/27/99	10/28/99
ca	17	1. mg/L	1	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Sodium	80	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99

D.F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0201
DATE SAMPLED: 10/22/99
NEL SAMPLE ID: P9910094-04

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.037	0.025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Arsenic	0.010	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Barium	0.091	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Boron	0.26	0.01 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Calcium	260	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Iron	0.26	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Magnesium	84	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Manganese	0.020	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/27/99	10/27/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Potassium	7.9	1. mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Silica	19	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Sodium	170	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Uranium	0.013	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99

D.F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0202
DATE SAMPLED: 10/22/99
NEL SAMPLE ID: P9910094-05

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.034	0.025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Arsenic	0.0094	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Barium	0.13	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Boron	0.26	0.01 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Calcium	220	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Iron	0.14	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Magnesium	0.77	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Manganese	0.024	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/27/99	10/27/99
Molybdenum	0.0043	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Potassium	8.4	1. mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Ca	21	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Sodium	140	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Uranium	0.0088	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99

D F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0204
 DATE SAMPLED: 10/22/99
 NEL SAMPLE ID: P9910094-06

TEST: AZ METALS PKG
 MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.031	0.025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Arsenic	0.0084	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Barium	0.13	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Boron	0.26	0.01 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Calcium	230	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Iron	0.16	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Magnesium	79	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Manganese	0.024	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/27/99	10/27/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Potassium	8.7	1. mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Na	20	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Sodium	140	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Uranium	0.0086	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0205
DATE SAMPLED: 10/22/99
NEL SAMPLE ID: P9910094-07

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.11	0.025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Arsenic	0.013	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Barium	0.057	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Boron	0.23	0.01 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Calcium	49	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Chromium	0.0055	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Iron	0.23	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Magnesium	15	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Manganese	0.018	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/27/99	10/27/99
Molybdenum	0.0044	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Potassium	5.9	1. mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Na	19	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Sodium	89	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10092Si-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	10. mg/L	10	SM 4500Si-D	NA	11/9/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10093-Hg-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/27/99	10/27/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10093MAs-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Arsenic	ND	0.001 mg/L	1	EPA 200.8	10/26/99	10/30/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10093MPb-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Lead	ND	0.001 mg/L	1	EPA 200.8	10/26/99	10/30/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10093MU-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.001 mg/L	1	EPA 200.8	10/26/99	10/30/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10094i-BLK

TEST: AZ METALS PKG

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Barium	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Boron	ND	0.01 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0198
DATE SAMPLED: 10/22/99
NEL SAMPLE ID: P9910094-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	11/1/99	
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	11/1/99	
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	11/1/99	
Alkalinity, Total	ND	25.	1	SM 2320 B	mg/L	11/1/99	
Bromide	ND	0.2	1	EPA 300.0	mg/L	11/4/99	
Chloride	0.31	0.1	1	EPA 300.0	mg/L	11/4/99	
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/31/99	
Hardness, Total (as CaCO3)	ND	1.	0.5	EPA 200.7	mg/L	10/28/99	
Nitrate/Nitrite as N, Total	0.072	0.05	1	SM 4500-NO3 F	mg/L-N	11/4/99	
pH	6.04	2.	1	EPA 150.1	pH Units	10/25/99	
pH Temperature	20.2	1.	1	EPA 150.1	°C	10/25/99	
Specific Conductance	4.00	1.	1	SM 2510 B	µS/cm	10/26/99	
Sulfate	ND	0.5	1	EPA 300.0	mg/L	11/4/99	
Total Dissolved Solids	ND	15.	1	SM 2540 C	mg/L	10/27/99	

D F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0199
 DATE SAMPLED: 10/22/99
 NEL SAMPLE ID: P9910094-02

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	270			1	SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	11/1/99
Alkalinity, Total	270	25.		1	SM 2320 B	mg/L	11/1/99
Bromide	ND	4.		20	EPA 300.0	mg/L	11/4/99
Chloride	2900	250.		2500	EPA 300.0	mg/L	11/6/99
Fluoride	0.71	0.4		1	SM 4500-F C	mg/L	10/31/99
Hardness, Total (as CaCO3)	3000	1.		0.5	EPA 200.7	mg/L	10/28/99
Nitrate/Nitrite as N, Total	ND	0.05		1	SM 4500-NO3 F	mg/L-N	11/4/99
pH	6.78	2.		1	EPA 150.1	pH Units	10/25/99
pH Temperature	19.6	1.		1	EPA 150.1	°C	10/25/99
Specific Conductance	8580	1.		1	SM 2510 B	µS/cm	10/26/99
Sulfate	280	25.		50	EPA 300.0	mg/L	11/5/99
Total Dissolved Solids	5950	150.		10	SM 2540 C	mg/L	10/27/99

D.F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0200
 DATE SAMPLED: 10/22/99
 NEL SAMPLE ID: P9910094-03

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	REPORTING			METHOD	UNITS	ANALYZED
		LIMIT	D. F.				
Alkalinity - Bicarbonate	120		1		SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND		1		SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND		1		SM 2320 B	mg/L	11/1/99
Alkalinity, Total	120	25.	1		SM 2320 B	mg/L	11/1/99
Bromide	0.60	0.2	1		EPA 300.0	mg/L	11/4/99
Chloride	110	10.	100		EPA 300.0	mg/L	11/6/99
Fluoride	1.6	0.4	1		SM 4500-F C	mg/L	10/31/99
Hardness, Total (as CaCO ₃)	160	1.	0.5		EPA 200.7	mg/L	10/28/99
Nitrate/Nitrite as N, Total	ND	0.05	1		SM 4500-NO ₃ F	mg/L-N	11/4/99
pH	8.22	2.	1		EPA 150.1	pH Units	10/25/99
pH Temperature	19.4	1.	1		EPA 150.1	°C	10/25/99
Specific Conductance	624	1.	1		SM 2510 B	µS/cm	10/26/99
Sulfate	50	50.	100		EPA 300.0	mg/L	11/6/99
Total Dissolved Solids	397	15.	1		SM 2540 C	mg/L	10/27/99

D F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0201
 DATE SAMPLED: 10/22/99
 NEL SAMPLE ID: P9910094-04

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	REPORTING			METHOD	UNITS	ANALYZED
	RESULT	LIMIT	D. F.			
Alkalinity - Bicarbonate	160		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity, Total	160	25.	1	SM 2320 B	mg/L	11/1/99
Bromide	ND	2.	10	EPA 300.0	mg/L	11/4/99
Chloride	660	25.	250	EPA 300.0	mg/L	11/5/99
Fluoride	1.2	0.4	1	SM 4500-F C	mg/L	10/31/99
Hardness, Total (as CaCO ₃)	1000	1.	0.5	EPA 200.7	mg/L	10/28/99
Nitrate/Nitrite as N, Total	0.62	0.05	1	SM 4500-NO ₃ F	mg/L-N	11/4/99
pH	7.23	2.	1	EPA 150.1	pH Units	10/25/99
pH Temperature	19.4	1.	1	EPA 150.1	°C	10/25/99
Specific Conductance	2470	1.	1	SM 2510 B	µS/cm	10/26/99
Sulfate	160	25.	50	EPA 300.0	mg/L	11/5/99
Total Dissolved Solids	1720	30.	2	SM 2540 C	mg/L	10/27/99

D F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0202
 DATE SAMPLED: 10/22/99
 NEL SAMPLE ID: P9910094-05

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	REPORTING LIMIT	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate	140		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity, Total	140	25.	1	SM 2320 B	mg/L	11/1/99
Bromide	ND	2.	10	EPA 300.0	mg/L	11/4/99
Chloride	650	25.	250	EPA 300.0	mg/L	11/5/99
Fluoride	0.98	0.4	1	SM 4500-F C	mg/L	10/31/99
Hardness, Total (as CaCO3)	860	1.	0.5	EPA 200.7	mg/L	10/28/99
Nitrate/Nitrite as N, Total	0.41	0.05	1	SM 4500-NO3 F	mg/L-N	11/4/99
pH	7.50	2.	1	EPA 150.1	pH Units	10/25/99
pH Temperature	19.8	1.	1	EPA 150.1	°C	10/25/99
Specific Conductance	2180	1.	1	SM 2510 B	µS/cm	10/26/99
Sulfate	130	25.	50	EPA 300.0	mg/L	11/5/99
Total Dissolved Solids	1620	30.	2	SM 2540 C	mg/L	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 JECT #: NA

CLIENT ID: M99-0204
 DATE SAMPLED: 10/22/99
 NEL SAMPLE ID: P9910094-06

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	140			1	SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	11/1/99
Alkalinity, Total	140	25.		1	SM 2320 B	mg/L	11/1/99
Bromide	ND	2.		10	EPA 300.0	mg/L	11/4/99
Chloride	560	25.		250	EPA 300.0	mg/L	11/5/99
Fluoride	0.95	0.4		1	SM 4500-F C	mg/L	10/31/99
Hardness, Total (as CaCO3)	890	1.		0.5	EPA 200.7	mg/L	10/28/99
Nitrate/Nitrite as N, Total	0.32	0.05		1	SM 4500-NO3 F	mg/L-N	11/4/99
pH	7.48	2.		1	EPA 150.1	pH Units	10/25/99
pH Temperature	19.8	1.		1	EPA 150.1	°C	10/25/99
Specific Conductance	2170	1.		1	SM 2510 B	µS/cm	10/26/99
Sulfate	140	25.		50	EPA 300.0	mg/L	11/5/99
Total Dissolved Solids	1390	30.		2	SM 2540 C	mg/L	10/27/99

D F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 SUBJECT #: NA

CLIENT ID: M99-0205
 DATE SAMPLED: 10/22/99
 NEL SAMPLE ID: P9910094-07

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	160			1	SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	11/1/99
Alkalinity, Total	160	25.		1	SM 2320 B	mg/L	11/1/99
Bromide	0.36	0.2		1	EPA 300.0	mg/L	11/4/99
Chloride	48	5.		50	EPA 300.0	mg/L	11/6/99
Fluoride	1.4	0.4		1	SM 4500-F C	mg/L	10/31/99
Hardness, Total (as CaCO ₃)	190	1.		0.5	EPA 200.7	mg/L	10/28/99
Nitrate/Nitrite as N, Total	1.3	0.05		1	SM 4500-NO ₃ F	mg/L-N	11/4/99
pH	7.98	2.		1	EPA 150.1	pH Units	10/25/99
pH Temperature	20.0	1.		1	EPA 150.1	°C	10/25/99
Specific Conductance	674	1.		1	SM 2510 B	µS/cm	10/26/99
Sulfate	93	25.		50	EPA 300.0	mg/L	11/6/99
Total Dissolved Solids	436	15.		1	SM 2540 C	mg/L	10/27/99

D F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991027TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991031F-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/31/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991101ALK-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity, Total	ND	25	1	SM 2320 B	mg/L	11/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991104IC-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	11/4/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/4/99
Sulfate	ND	0.5	1	EPA 300.0	mg/L	11/4/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991104NO2NO3C1-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	11/4/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991104NO2NO3E-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	11/4/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 9911051C-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/5/99
Sulfate	ND	0.5	1	EPA 300.0	mg/L	11/5/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 9911061C-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/6/99
Sulfate	ND	0.5	1	EPA 300.0	mg/L	11/6/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0198
DATE SAMPLED: 10/22/99
NEL SAMPLE ID: P9910094-01

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 11/1/99

DILUTION: 1

ANALYZED: 11/1/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	88	86 - 115
Toluene-d8	98	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: IAL #4
PROJECT #: NA

CLIENT ID: M99-0199
DATE SAMPLED: 10/22/99
NEL SAMPLE ID: P9910094-02

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRXC: Aqueous

EXTRACTED: 11/1/99

DILUTION: 1

ANALYZED: 11/1/99

PARAMETER	Result	Reporting Limit
Benzene	ND	2 µg/L
Toluene	ND	2 µg/L
Ethylbenzene	ND	2 µg/L
Total Xylenes	ND	4 µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	96	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 JECT #: NA

CLIENT ID: M99-0200
 DATE SAMPLED: 10/22/99
 NEL SAMPLE ID: P9910094-03

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 METHOD: EPA 8260B ANALYST: SKV - Las Vegas Division
 MATRIX: Aqueous EXTRACTED: 11/1/99
 DILUTION: 1 ANALYZED: 11/1/99

PARAMETER	Result	Reporting Limit
Benzene	2.6 µg/L	2. µg/L
Toluene	7.7 µg/L	2. µg/L
Ethylbenzene	2.6 µg/L	2. µg/L
Total Xylenes	4.1 µg/L	4. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	89	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0201
 DATE SAMPLED: 10/22/99
 NEL SAMPLE ID: P9910094-04

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 METHOD: EPA 8260B
 MATRIX: Aqueous
 DILUTION: 1

ANALYST: SKV - Las Vegas Division
 EXTRACTED: 11/1/99
 ANALYZED: 11/1/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	97	86 - 115
Toluene-d8	99	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0202
 DATE SAMPLED: 10/22/99
 NEL SAMPLE ID: P9910094-05

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 11/1/99

DILUTION: 1

ANALYZED: 11/1/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	4.7 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	92	86 - 115
Toluene-d8	101	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0204
 DATE SAMPLED: 10/22/99
 NEL SAMPLE ID: P9910094-06

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 METHOD: EPA 8260B ANALYST: SKV - Las Vegas Division
 MATRIX: Aqueous EXTRACTED: 11/1/99
 DILUTION: 1 ANALYZED: 11/1/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	4.4 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	97	86 - 115
Toluene-d8	102	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0205
 DATE SAMPLED: 10/22/99
 NEL SAMPLE ID: P9910094-07

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 METHOD: EPA 8260B
 MATRIX: Aqueous
 DILUTION: 1

ANALYST: SKV - Las Vegas Division
 EXTRACTED: 11/1/99
 ANALYZED: 11/1/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	92	86 - 115
Toluene-d8	102	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991101BX60-BLK

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 11/1/99

ANALYZED: 11/1/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	97	86 - 115
Toluene-d8	104	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	991025ph-LCS	7	7.01	100	99 - 101	
7.00 Buffer	991025ph-LCSD	7	7.041	101	99 - 101	0.4

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	991026COND2-LCS	1412	1400	99	95 - 105	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	991027TDS-LCS	1000	974	97	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	991031F-LCS	1	0.899	90	85 - 115	
Fluoride	991031F-LCSD	1	0.923	92	85 - 115	2.6
Fluoride	P9910094-01-MS	1	1.04	104	80 - 120	
Fluoride	P9910094-01-MSD	1	1.01	101	80 - 120	2.9

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	991101ALK-LCS	125	124	99	85 - 115	
Alkalinity, Total	991101ALK-LCSD	125	122	98	85 - 115	1.6

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	991101BX60-LCS	50	52	104	80 - 120	
Benzene	P9910094-06-MS	50	54	99	76 - 127	
Benzene	P9910094-06-MSD	50	55	101	76 - 127	2.
Toluene	991101BX60-LCS	50	51	102	80 - 120	
Toluene	P9910094-06-MS	50	50	100	76 - 125	
Toluene	P9910094-06-MSD	50	50	100	76 - 125	0.
Ethylbenzene	991101BX60-LCS	50	53	106	80 - 120	
Ethylbenzene	P9910094-06-MS	50	50	100	70 - 130	
Ethylbenzene	P9910094-06-MSD	50	50	100	70 - 130	0.
Total Xylenes	991101BX60-LCS	150	165	110	80 - 120	
Total Xylenes	P9910094-06-MS	150	153	102	70 - 130	
Total Xylenes	P9910094-06-MSD	150	150	100	70 - 130	1.3

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	991104IC-LCS	100	102	102	90 - 110	
Chloride	991104IC-LCSD	100	101	101	90 - 110	1.
Chloride	P9910092-02-MS	100	7696	96	80 - 120	
Bromide	991104IC-LCS	100	104	104	90 - 110	
Bromide	991104IC-LCSD	100	104	104	90 - 110	0.
Bromide	P9910092-02-MS	100	105	105	80 - 120	
Sulfate	991104IC-LCS	100	104	104	90 - 110	
Sulfate	991104IC-LCSD	100	102	102	90 - 110	1.9
Sulfate	P9910092-02-MS	100	117	92	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	991104NO2NO3C1-LCS	0.5	0.5151	103	90 - 110	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	991104NO2NO3E-LCS	0.5	0.5311	106	90 - 110	
Nitrate/Nitrite as N, Total	R9911004-01-MS	1	0.328	33 JI	80 - 120	
Nitrate/Nitrite as N, Total	R9911004-01-MSD	1	0.332	33 JI	80 - 120	1.2

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	991105IC-LCS	100	101	101	90 - 110	
Chloride	991105IC-LCSD	100	100	100	90 - 110	1.
Chloride	R9910094-01-MS	100	98	97	80 - 120	
Sulfate	991105IC-LCS	100	101	101	90 - 110	
Sulfate	991105IC-LCSD	100	102	102	90 - 110	1.
Sulfate	R9910094-01-MS	100	87	85	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	991106IC-LCS	100	100	100	90 - 110	
Chloride	991106IC-LCSD	100	99	99	90 - 110	1.
Chloride	P9910094-02-MS	100	3015	115	80 - 120	
Sulfate	991106IC-LCS	100	103	103	90 - 110	
Sulfate	991106IC-LCSD	100	105	105	90 - 110	1.9

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Mercury	P10093-Hg-LCS	0.005	0.00519	104	85 - 115	
Mercury	P9910093-01-MS	0.005	0.00496	99	70 - 130	
Mercury	P9910093-01-MSD	0.005	0.0049	98	70 - 130	1.2

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Arsenic	P10093MAs-LCS	0.01	0.0115	115	85 - 115	
Arsenic	P9910093-01-MS	0.1	0.113	102	75 - 125	
Arsenic	P9910093-01-MSD	0.1	0.115	104	75 - 125	1.9

ND - Not Detected

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RATORIES
 iral Gas Company

<u>Acceptable</u>		<u>NEL Sample ID</u>	<u>Spike</u>	<u>Spike</u>	<u>Percent</u>	<u>Acceptable</u>	
<u>Range</u>	<u>RPD</u>		<u>Amount</u>	<u>Result</u>	<u>Recovery</u>	<u>Range</u>	<u>RPD</u>
85 - 115		P10093MPb-LCS	0.005	0.00554	111	85 - 115	
75 - 125		P9910093-01-MS	0.05	0.0517	92	75 - 125	
75 - 125	2.9	P9910093-01-MSD	0.05	0.0515	92	75 - 125	0.4

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Selenium	P10093MSe-LCS	0.01	0.0113	113	85 - 115	
Selenium	P9910093-01-MS	0.1	0.114	105	75 - 125	
Selenium	P9910093-01-MSD	0.1	0.111	102	75 - 125	2.9

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Uranium	P10093MU-LCS	0.05	0.0572	114	85 - 115	
Uranium	P9910093-01-MS	0.05	0.0494	99	75 - 125	
Uranium	P9910093-01-MSD	0.05	0.0509	102	75 - 125	3.

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Aluminum	P10094i-LCS	1	0.96	96	85 - 115	
Aluminum	P9910094-01-MS	1	0.98	98	75 - 125	
Aluminum	P9910094-01-MSD	1	0.958	96	75 - 125	2.3
Barium	P10094i-LCS	1	0.968	97	85 - 115	
Barium	P9910094-01-MS	1	0.977	98	75 - 125	
Barium	P9910094-01-MSD	1	0.973	97	75 - 125	0.4
Boron	P10094i-LCS	1	0.996	100	85 - 115	
Boron	P9910094-01-MS	1	0.994	99	75 - 125	
Boron	P9910094-01-MSD	1	0.982	98	75 - 125	1.2
Cadmium	P10094i-LCS	0.2	0.195	98	85 - 115	
Cadmium	P9910094-01-MS	0.2	0.195	98	75 - 125	
Cadmium	P9910094-01-MSD	0.2	0.194	97	75 - 125	0.5
Calcium	P10094i-LCS	20	20.4	102	85 - 115	
Calcium	P9910094-01-MS	20	20.7	102	75 - 125	
Calcium	P9910094-01-MSD	20	20.6	101	75 - 125	0.5
Chromium	P10094i-LCS	0.5	0.496	99	85 - 115	
Chromium	P9910094-01-MS	0.5	0.497	99	75 - 125	
Chromium	P9910094-01-MSD	0.5	0.494	99	75 - 125	0.6
Cobalt	P10094i-LCS	0.5	0.488	98	85 - 115	
Cobalt	P9910094-01-MS	0.5	0.489	98	75 - 125	
Cobalt	P9910094-01-MSD	0.5	0.486	97	75 - 125	0.6
Copper	P10094i-LCS	0.5	0.483	97	85 - 115	
Copper	P9910094-01-MS	0.5	0.487	97	75 - 125	
Copper	P9910094-01-MSD	0.5	0.485	97	75 - 125	0.4
Iron	P10094i-LCS	1	0.992	99	85 - 115	
Iron	P9910094-01-MS	1	1.01	101	75 - 125	
Iron	P9910094-01-MSD	1	0.994	99	75 - 125	1.6
Magnesium	P10094i-LCS	20	20	100	85 - 115	
Magnesium	P9910094-01-MS	20	20.1	101	75 - 125	
Magnesium	P9910094-01-MSD	20	20	100	75 - 125	0.5
Manganese	P10094i-LCS	0.5	0.48	96	85 - 115	
Manganese	P9910094-01-MS	0.5	0.481	96	75 - 125	
Manganese	P9910094-01-MSD	0.5	0.481	96	75 - 125	0
Molybdenum	P10094i-LCS	0.1	0.0993	99	85 - 115	
Molybdenum	P9910094-01-MS	0.1	0.0989	99	75 - 125	
Molybdenum	P9910094-01-MSD	0.1	0.0975	98	75 - 125	1.4
Nickel	P10094i-LCS	1	0.985	99	85 - 115	
Nickel	P9910094-01-MS	1	0.987	99	75 - 125	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nickel	P9910094-01-MSD	1	0.979	98	75 - 125	0.8
Potassium	P10094i-LCS	20	19.9	99	85 - 115	
Potassium	P9910094-01-MS	20	20	100	75 - 125	
Potassium	P9910094-01-MSD	20	19.9	99	75 - 125	0.5
Silver	P10094i-LCS	0.5	0.501	100	85 - 115	
Silver	P9910094-01-MS	0.5	0.499	100	75 - 125	
Silver	P9910094-01-MSD	0.5	0.497	99	75 - 125	0.4
Sodium	P10094i-LCS	20	20.4	102	85 - 115	
Sodium	P9910094-01-MS	20	20.9	105	75 - 125	
Sodium	P9910094-01-MSD	20	20.6	103	75 - 125	1.4
Zinc	P10094i-LCS	0.5	0.49	98	85 - 115	
Zinc	P9910094-01-MS	0.5	0.495	99	75 - 125	
Zinc	P9910094-01-MSD	0.5	0.493	99	75 - 125	0.4

ND - Not Detected

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Vegas! x 899/0094

CHAIN OF CUSTODY RECORD

Page _____ of _____

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White • Testing Laboratory Canary • EPN[®] Lab Pink • Field Sampler

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NEL LABORATORIES

Reno • Las Vegas
Phoenix • So. California

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P9910093

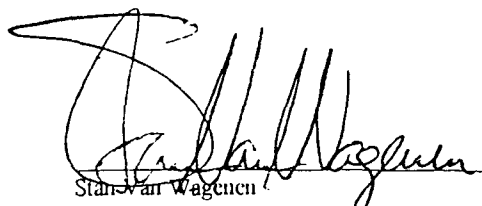
Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/23/99.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some QA results have been flagged as follows:

- C - Sample concentration is a least 5 times greater than spike contribution. Spike recovery criteria do not apply.


Stan van Wageningen
Laboratory Manager

11/18/99
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0203
DATE SAMPLED: 10/22/99
NEL SAMPLE ID: P9910093-01

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Arsenic	0.011	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Barium	0.10	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Boron	0.18	0.01 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Calcium	72	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Copper	0.022	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Iron	2.8	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Lead	0.0057	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Magnesium	21	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Manganese	0.078	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/27/99	10/27/99
Molybdenum	0.0049	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Potassium	4.8	1. mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Ca	21	10. mg/L	10	SM 4500Si-D	NA	11/9/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Sodium	73	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/26/99	10/30/99
Zinc	0.50	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10092Si-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	10. mg/L	10	SM 4500Si-D	NA	11/9/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10093-Hg-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/27/99	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10093MA5-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Arsenic	ND	0.001 mg/L	1	EPA 200.8	10/26/99	10/30/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10093MPb-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Lead	ND	0.001 mg/L	1	EPA 200.8	10/26/99	10/30/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10093MU-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.001 mg/L	1	EPA 200.8	10/26/99	10/30/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: AZ METALS PKG

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: P10094i-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Aluminum	ND	0.025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Barium	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Boron	ND	0.01 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0203
DATE SAMPLED: 10/22/99
NEL SAMPLE ID: P9910093-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	140			1	SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	11/1/99
Alkalinity, Total	140	25.		1	SM 2320 B	mg/L	11/1/99
Bromide	0.53	0.2		1	EPA 300.0	mg/L	11/4/99
Chloride	130	10.	100		EPA 300.0	mg/L	11/4/99
Fluoride	1.0	0.4		1	SM 4500-F C	mg/L	10/31/99
Hardness, Total (as CaCO3)	270	1.	0.5		EPA 200.7	mg/L	10/28/99
Nitrate/Nitrite as N, Total	0.41	0.05		1	SM 4500-NO3 F	mg/L-N	11/4/99
pH	7.86	2.		1	EPA 150.1	pH Units	10/25/99
pH Temperature	19.2	1.		1	EPA 150.1	°C	10/25/99
Specific Conductance	788	1.		1	SM 2510 B	µS/cm	10/26/99
Sulfate	56	50.	100		EPA 300.0	mg/L	11/4/99
Total Dissolved Solids	490	15.		1	SM 2540 C	mg/L	10/27/99

D F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991027TDS-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991031F-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/31/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991101ALK-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity, Total	ND	25	1	SM 2320 B	mg/L	11/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company

CLIENT ID: Method Blank

PROJECT ID: JAL #4

DATE SAMPLED: NA

JECT #: NA

NEL SAMPLE ID: 991104IC-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	11/4/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/4/99
Sulfate	ND	0.5	1	EPA 300.0	mg/L	11/4/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991104NO2NO3D-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	11/4/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0203
DATE SAMPLED: 10/22/99
NEL SAMPLE ID: P9910093-01

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
METHOD: EPA 8260B
MATRIX: Aqueous
DILUTION: 1

ANALYST: SKV - Las Vegas Division
EXTRACTED: 10/29/99
ANALYZED: 10/29/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	98	86 - 115
Toluene-d8	103	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991029BX60-BLK

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
METHOD: EPA 8260B
MATRIX: Aqueous
ANALYST: SKV - Las Vegas Division
EXTRACTED: 10/29/99
ANALYZED: 10/29/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	88	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	991025ph-LCS	7	7.01	100	99 - 101	
7.00 Buffer	991025ph-LCSD	7	7.041	101	99 - 101	0.4

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	991026COND2-LCS	1412	1400	99	95 - 105	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	991027TDS-LCS	1000	974	97	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company

PROJECT ID: JAL #4

OBJECT #: NA

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	991029BX60-LCS	20	21	105	80 - 120	
Benzene	P9910088-05-MS	20	23	115	76 - 127	
Benzene	P9910088-05-MSD	20	23	115	76 - 127	0.
Toluene	991029BX60-LCS	20	21	105	80 - 120	
Toluene	P9910088-05-MS	20	23	115	76 - 125	
Toluene	P9910088-05-MSD	20	22	110	76 - 125	4.4
Ethylbenzene	991029BX60-LCS	20	20	100	80 - 120	
Ethylbenzene	P9910088-05-MS	20	21	105	70 - 130	
Ethylbenzene	P9910088-05-MSD	20	21	105	70 - 130	0.
Total Xylenes	991029BX60-LCS	60	62	103	80 - 120	
Total Xylenes	P9910088-05-MS	60	64	107	70 - 130	
Total Xylenes	P9910088-05-MSD	60	63	105	70 - 130	1.6

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	991031F-LCS	1	0.899	90	85 - 115	
Fluoride	991031F-LCSD	1	0.923	92	85 - 115	2.6
Fluoride	P9910094-01-MS	1	1.04	104	80 - 120	
Fluoride	P9910094-01-MSD	1	1.01	101	80 - 120	2.9

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	991101ALK-LCS	125	124	99	85 - 115	
Alkalinity, Total	991101ALK-LCSD	125	122	98	85 - 115	1.6

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	991104IC-LCS	100	102	102	90 - 110	
Chloride	991104IC-LCSD	100	101	101	90 - 110	1.
Chloride	P9910092-02-MS	100	7696	96	80 - 120	
Bromide	991104IC-LCS	100	104	104	90 - 110	
Bromide	991104IC-LCSD	100	104	104	90 - 110	0.
Bromide	P9910092-02-MS	100	105	105	80 - 120	
Sulfate	991104IC-LCS	100	104	104	90 - 110	
Sulfate	991104IC-LCSD	100	102	102	90 - 110	1.9
Sulfate	P9910092-02-MS	100	117	92	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	991104NO2NO3D-LCS	0.5	0.5182	104	90 - 110	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Mercury	P10093-Hg-LCS	0.005	0.00519	104	85 - 115	
Mercury	P9910093-G1-MS	0.005	0.00496	99	70 - 130	
Mercury	P9910093-01-MSD	0.005	0.0049	98	70 - 130	1.2

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Arsenic	P10093MAs-LCS	0.01	0.0115	115	85 - 115	
Arsenic	P9910093-01-MS	0.1	0.113	102	75 - 125	
Arsenic	P9910093-01-MSD	0.1	0.115	104	75 - 125	1.9

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Lead	P10093MPb-LCS	0.005	0.00554	111	85 - 115	
Lead	P9910093-01-MS	0.05	0.0517	92	75 - 125	
Lead	P9910093-01-MSD	0.05	0.0515	92	75 - 125	0.4

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Selenium	P10093MSe-LCS	0.01	0.0113	113	85 - 115	
Selenium	P9910093-01-MS	0.1	0.114	105	75 - 125	
Selenium	P9910093-01-MSD	0.1	0.111	102	75 - 125	2.9

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Uranium	P10093MU-LCS	0.05	0.0572	114	85 - 115	
Uranium	P9910093-01-MS	0.05	0.0494	99	75 - 125	
Uranium	P9910093-01-MSD	0.05	0.0509	102	75 - 125	3.

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Aluminum	P10094i-LCS	1	0.96	96	85 - 115	
Aluminum	P9910094-01-MS	1	0.98	98	75 - 125	
Aluminum	P9910094-01-MSD	1	0.958	96	75 - 125	2.3
Barium	P10094i-LCS	1	0.968	97	85 - 115	
Barium	P9910094-01-MS	1	0.977	98	75 - 125	
Barium	P9910094-01-MSD	1	0.973	97	75 - 125	0.4
Boron	P10094i-LCS	1	0.996	100	85 - 115	
Boron	P9910094-01-MS	1	0.994	99	75 - 125	
Boron	P9910094-01-MSD	1	0.982	98	75 - 125	1.2
Cadmium	P10094i-LCS	0.2	0.195	98	85 - 115	
Cadmium	P9910094-01-MS	0.2	0.195	98	75 - 125	
Cadmium	P9910094-01-MSD	0.2	0.194	97	75 - 125	0.5
Calcium	P10094i-LCS	20	20.4	102	85 - 115	
Calcium	P9910094-01-MS	20	20.7	102	75 - 125	
Calcium	P9910094-01-MSD	20	20.6	101	75 - 125	0.5
Chromium	P10094i-LCS	0.5	0.496	99	85 - 115	
Chromium	P9910094-01-MS	0.5	0.497	99	75 - 125	
Chromium	P9910094-01-MSD	0.5	0.494	99	75 - 125	0.6
Cobalt	P10094i-LCS	0.5	0.488	98	85 - 115	
Cobalt	P9910094-01-MS	0.5	0.489	98	75 - 125	
Cobalt	P9910094-01-MSD	0.5	0.486	97	75 - 125	0.6
Copper	P10094i-LCS	0.5	0.483	97	85 - 115	
Copper	P9910094-01-MS	0.5	0.487	97	75 - 125	
Copper	P9910094-01-MSD	0.5	0.485	97	75 - 125	0.4
Iron	P10094i-LCS	1	0.992	99	85 - 115	
Iron	P9910094-01-MS	1	1.01	101	75 - 125	
Iron	P9910094-01-MSD	1	0.994	99	75 - 125	1.6
Magnesium	P10094i-LCS	20	20	100	85 - 115	
Magnesium	P9910094-01-MS	20	20.1	101	75 - 125	
Magnesium	P9910094-01-MSD	20	20	100	75 - 125	0.5
Manganese	P10094i-LCS	0.5	0.48	96	85 - 115	
Manganese	P9910094-01-MS	0.5	0.481	96	75 - 125	
Manganese	P9910094-01-MSD	0.5	0.481	96	75 - 125	0.
Molybdenum	P10094i-LCS	0.1	0.0993	99	85 - 115	
Molybdenum	P9910094-01-MS	0.1	0.0989	99	75 - 125	
Molybdenum	P9910094-01-MSD	0.1	0.0975	98	75 - 125	1.4
Nickel	P10094i-LCS	1	0.985	99	85 - 115	
Nickel	P9910094-01-MS	1	0.987	99	75 - 125	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nickel	P9910094-01-MSD	1	0.979	98	75 - 125	0.8
Potassium	P10094i-LCS	20	19.9	99	85 - 115	
Potassium	P9910094-01-MS	20	20	100	75 - 125	
Potassium	P9910094-01-MSD	20	19.9	99	75 - 125	0.5
Silver	P10094i-LCS	0.5	0.501	100	85 - 115	
Silver	P9910094-01-MS	0.5	0.499	100	75 - 125	
Silver	P9910094-01-MSD	0.5	0.497	99	75 - 125	0.4
Sodium	P10094i-LCS	20	20.4	102	85 - 115	
Sodium	P9910094-01-MS	20	20.9	105	75 - 125	
Sodium	P9910094-01-MSD	20	20.6	103	75 - 125	1.4
Zinc	P10094i-LCS	0.5	0.49	98	85 - 115	
Zinc	P9910094-01-MS	0.5	0.495	99	75 - 125	
Zinc	P9910094-01-MSD	0.5	0.493	99	75 - 125	0.4

ND - Not Detected

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9910093

Due Date 11/1

CHAIN OF CUSTODY RECORD

Page _____ of _____

NEL LABORATORIES

Reno • Las Vegas
Phoenix • So. California

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P9910099

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/26/99.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

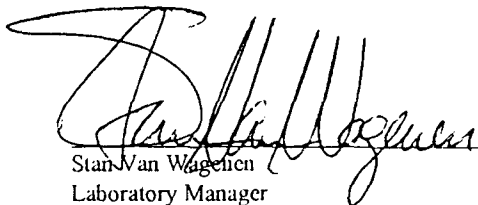
Some results have been flagged as follows:

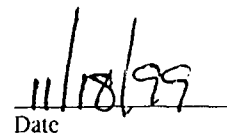
J - This concentration should be considered an estimate due laboratory control sample failure.

Some QA results have been flagged as follows:

C - Sample concentration is a least 5 times greater than spike contribution. Spike recovery criteria do not apply.

J - This concentration should be considered an estimate due laboratory control sample failure.


Stan Van Wageningen
Laboratory Manager


Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0206
DATE SAMPLED: 10/23/99
NEL SAMPLE ID: P9910099-01

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.79	0.025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Arsenic	0.0089	0.005 mg/L	5	EPA 200.8	10/29/99	10/30/99
Barium	0.11	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Boron	0.21	0.01 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Calcium	66	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Chromium	0.022	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Copper	0.0039	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Iron	0.75	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/29/99	10/30/99
Magnesium	20	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Manganese	0.051	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/28/99	10/28/99
Molybdenum	0.040	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Potassium	28	1. mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Ca	30	10. mg/L	10	SM 4500Si-D	NA	11/10/99
Copper	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Sodium	130	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Uranium	ND	0.0005 mg/L	0.5	EPA 200.8	10/29/99	10/30/99
Zinc	0.096	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: P10094i-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Aluminum	ND	0.025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Barium	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Boron	ND	0.01 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	10/27/99	10/28/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/27/99	10/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10099-Hg-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/28/99	10/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10099Si-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	NA	11/10/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company

CLIENT ID: Method Blank

PROJECT ID: JAL #4

DATE SAMPLED: NA

JECT #: NA

NEL SAMPLE ID: P10100M-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Arsenic	ND	0.001 mg/L	1	EPA 200.8	10/29/99	10/30/99
Lead	ND	0.001 mg/L	1	EPA 200.8	10/29/99	10/30/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10100M-U-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/29/99	10/30/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0206
DATE SAMPLED: 10/23/99
NEL SAMPLE ID: P9910099-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	130			1	SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	11/1/99
Alkalinity, Total	130	25.		1	SM 2320 B	mg/L	11/1/99
Bromide	ND	2.		10	EPA 300.0	mg/L	11/4/99
Chloride	180	10.		100	EPA 300.0	mg/L	11/8/99
Fluoride	1.6	0.4		1	SM 4500-F C	mg/L	11/2/99
Hardness, Total (as CaCO ₃)	250	1.		0.5	EPA 200.7	mg/L	10/28/99
Nitrate/Nitrite as N, Total	0.81	0.05		1	SM 4500-NO ₃ F	mg/L-N	11/4/99
pH	8.24	2.		1	EPA 150.1	pH Units	10/26/99
pH Temperature	21.2	1.		1	EPA 150.1	°C	10/26/99
Specific Conductance	1010	1.		1	SM 2510 B	µS/cm	10/26/99
Sulfate	87	50.		100	EPA 300.0	mg/L	11/8/99
Total Dissolved Solids	587	15.		1	SM 2540 C	mg/L	10/27/99

D.F - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company

CLIENT ID: Method Blank

PROJECT ID: JAL #4

DATE SAMPLED: NA

OBJECT #: NA

NEL SAMPLE ID: 991027TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991101ALK-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity, Total	ND	25	1	SM 2320 B	mg/L	11/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991102F-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	11/2/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991104IC-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	11/4/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991104NO2NO3D-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	11/4/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991108IC-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/8/99
Sulfate	ND	0.5	1	EPA 300.0	mg/L	11/8/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0206
DATE SAMPLED: 10/23/99
NEL SAMPLE ID: P9910099-01

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 10/29/99

DILUTION: 1

ANALYZED: 10/29/99

PARAMETER	Result	Reporting Limit
Benzene	3.2 µg/L	2. µg/L
Toluene	5.3 µg/L	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	95	86 - 115
Toluene-d8	105	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 102999-E2-BLK

TEST: 8310
METHOD: EPA 8310
MATRIX: Aqueous

ANALYST: YW - Reno Division
EXTRACTED: 10/29/99
ANALYZED: 11/1/99

PARAMETER	Result	Reporting Limit
Acenaphthene	ND	µg/L
Acenaphthylene	ND	µg/L
Anthracene	ND	µg/L
Benzo (a) anthracene	ND	µg/L
Benzo (b) fluoranthene	ND	µg/L
Benzo (k) fluoranthene	ND	µg/L
Benzo (g,h,i) perylene	ND	µg/L
Benzo (a) pyrene	ND	µg/L
Chrysene	ND	µg/L
Dibenzo (a,h) anthracene	ND	µg/L
Fluoranthene	ND	µg/L
Fluorene	ND	µg/L
Indeno (1,2,3-c,d) pyrene	ND	µg/L
Naphthalene	ND	µg/L
Phenanthrene	ND	µg/L
Pyrene	ND	µg/L

QUALITY CONTROL DATA:

surrogate	% Recovery	Acceptable Range
Decafluorobiphenyl	90	68 - 94

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991029BX60-BLK

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 10/29/99

ANALYZED: 10/29/99

PARAMETER	Result	Reporting Limit
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	88	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: 8310
 MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Naphthalene	102999-E2-LCS	2	1.76	88	1 - 122	
Naphthalene	102999-E2-LCSD	2	1.89	95	1 - 122	7.1
Acenaphthylene	102999-E2-LCS	2	1.56	78	1 - 139	
Acenaphthylene	102999-E2-LCSD	2	1.91	96	1 - 139	20.2
Acenaphthene	102999-E2-LCS	2	1.88	94	1 - 124	
Acenaphthene	102999-E2-LCSD	2	2.22	111	1 - 124	16.6
Fluorene	102999-E2-LCS	2	1.96	98	1 - 142	
Fluorene	102999-E2-LCSD	2	2.1	105	1 - 142	6.9
Phenanthrene	102999-E2-LCS	2	1.93	97	1 - 155	
Phenanthrene	102999-E2-LCSD	2	2.02	101	1 - 155	4.6
Anthracene	102999-E2-LCS	2	1.91	96	1 - 126	
Anthracene	102999-E2-LCSD	2	2.02	101	1 - 126	5.6
Fluoranthene	102999-E2-LCS	2	1.89	95	14 - 123	
Fluoranthene	102999-E2-LCSD	2	1.91	96	14 - 123	1.1
Pyrene	102999-E2-LCS	2	2.03	101	1 - 140	
Pyrene	102999-E2-LCSD	2	2.07	103	1 - 140	2.
Benzo (a) anthracene	102999-E2-LCS	2	2	100	12 - 135	
Benzo (a) anthracene	102999-E2-LCSD	2	2.03	101	12 - 135	1.5
Chrysene	102999-E2-LCS	2	1.95	98	1 - 199	
Chrysene	102999-E2-LCSD	2	1.97	99	1 - 199	1.
Benzo (b) fluoranthene	102999-E2-LCS	2	2	100	6 - 150	
Benzo (b) fluoranthene	102999-E2-LCSD	2	2.03	101	6 - 150	1.5
Benzo (k) fluoranthene	102999-E2-LCS	2	1.99	100	1 - 159	
Benzo (k) fluoranthene	102999-E2-LCSD	2	2.02	101	1 - 159	1.5
Benzo (a) pyrene	102999-E2-LCS	2	2	100	1 - 128	
Benzo (a) pyrene	102999-E2-LCSD	2	2.02	101	1 - 128	1.
Dibenzo (a,h) anthracene	102999-E2-LCS	2	2.67	134 J	1 - 110	
Dibenzo (a,h) anthracene	102999-E2-LCSD	2	2.74	137 J	1 - 110	2.6
Benzo (g,h,i) perylene	102999-E2-LCS	2	1.44	72	1 - 116	
Benzo (g,h,i) perylene	102999-E2-LCSD	2	1.46	73	1 - 116	1.4
Indeno (1,2,3-c,d) pyrene	102999-E2-LCS	2	1.97	99	1 - 116	
Indeno (1,2,3-c,d) pyrene	102999-E2-LCSD	2	1.99	100	1 - 116	1.

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	991026COND2-LCS	1412	1400	99	95 - 105	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	991026PH-LCS	7	7.001	100	99 - 101	
7.00 Buffer	991026PH-LCSD	7	7.02	100	99 - 101	0.3

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	991027TDS-LCS	1000	974	97	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	991029BX60-LCS	20	21	105	80 - 120	
Benzene	P9910088-05-MS	20	23	115	76 - 127	
Benzene	P9910088-05-MSD	20	23	115	76 - 127	0.
Toluene	991029BX60-LCS	20	21	105	80 - 120	
Toluene	P9910088-05-MS	20	23	115	76 - 125	
Toluene	P9910088-05-MSD	20	22	110	76 - 125	4.4
Ethylbenzene	991029BX60-LCS	20	20	100	80 - 120	
Ethylbenzene	P9910088-05-MS	20	21	105	70 - 130	
Ethylbenzene	P9910088-05-MSD	20	21	105	70 - 130	0.
Total Xylenes	991029BX60-LCS	60	62	103	80 - 120	
Total Xylenes	P9910088-05-MS	60	64	107	70 - 130	
Total Xylenes	P9910088-05-MSD	60	63	105	70 - 130	1.6

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	991101ALK-LCS	125	124	99	85 - 115	
Alkalinity, Total	991101ALK-LCSD	125	122	98	85 - 115	1.6

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Drinking Water

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	991102F-LCS	1	1.06	106	85 - 115	
Fluoride	L9910286-01-MS	1	0.939	94	80 - 120	

ND - Not Detected

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<u>Percent</u> <u>Recovery</u>	<u>Acceptable</u> <u>Range</u>	<u>RPD</u>	<u>NEL Sample ID</u>	<u>Spike</u> <u>Amount</u>	<u>Spike</u> <u>Result</u>	<u>Percent</u> <u>Recovery</u>	<u>Acceptable</u> <u>Range</u>	<u>RPD</u>
104	90 - 110		991104IC-LCS	100	104	104	90 - 110	
			991104IC-LCSD	100	104	104	90 - 110	0.
			9910092-02-MS	100	105	105	80 - 120	

not in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	991104NO2NO3D-LCS	0.5	0.5182	104	90 - 110	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	991108IC-LCS	100	101	101	90 - 110	
Chloride	991108IC-LCSD	100	101	101	90 - 110	0.
Chloride	P9910099-01-MS	100	279	99	80 - 120	
Sulfate	991108IC-LCS	100	104	104	90 - 110	
Sulfate	991108IC-LCSD	100	103	103	90 - 110	1.
Sulfate	P9910099-01-MS	100	178	91	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Aluminum	P10094i-LCS	1	0.96	96	85 - 115	
Aluminum	P9910094-01-MS	1	0.98	98	75 - 125	
Aluminum	P9910094-01-MSD	1	0.958	96	75 - 125	2.3
Barium	P10094i-LCS	1	0.968	97	85 - 115	
Barium	P9910094-01-MS	1	0.977	98	75 - 125	
Barium	P9910094-01-MSD	1	0.973	97	75 - 125	0.4
Boron	P10094i-LCS	1	0.996	100	85 - 115	
Boron	P9910094-01-MS	1	0.994	99	75 - 125	
Boron	P9910094-01-MSD	1	0.982	98	75 - 125	1.2
Cadmium	P10094i-LCS	0.2	0.195	98	85 - 115	
Cadmium	P9910094-01-MS	0.2	0.195	98	75 - 125	
Cadmium	P9910094-01-MSD	0.2	0.194	97	75 - 125	0.5
Calcium	P10094i-LCS	20	20.4	102	85 - 115	
Calcium	P9910094-01-MS	20	20.7	102	75 - 125	
Calcium	P9910094-01-MSD	20	20.6	101	75 - 125	0.5
Chromium	P10094i-LCS	0.5	0.496	99	85 - 115	
Chromium	P9910094-01-MS	0.5	0.497	99	75 - 125	
Chromium	P9910094-01-MSD	0.5	0.494	99	75 - 125	0.6
Cobalt	P10094i-LCS	0.5	0.488	98	85 - 115	
Cobalt	P9910094-01-MS	0.5	0.489	98	75 - 125	
Cobalt	P9910094-01-MSD	0.5	0.486	97	75 - 125	0.6
Copper	P10094i-LCS	0.5	0.483	97	85 - 115	
Copper	P9910094-01-MS	0.5	0.487	97	75 - 125	
Copper	P9910094-01-MSD	0.5	0.485	97	75 - 125	0.4
Iron	P10094i-LCS	1	0.992	99	85 - 115	
Iron	P9910094-01-MS	1	1.01	101	75 - 125	
Iron	P9910094-01-MSD	1	0.994	99	75 - 125	1.6
Magnesium	P10094i-LCS	20	20	100	85 - 115	
Magnesium	P9910094-01-MS	20	20.1	101	75 - 125	
Magnesium	P9910094-01-MSD	20	20	100	75 - 125	0.5
Manganese	P10094i-LCS	0.5	0.48	96	85 - 115	
Manganese	P9910094-01-MS	0.5	0.481	96	75 - 125	
Manganese	P9910094-01-MSD	0.5	0.481	96	75 - 125	0.
Molybdenum	P10094i-LCS	0.1	0.0993	99	85 - 115	
Molybdenum	P9910094-01-MS	0.1	0.0989	99	75 - 125	
Molybdenum	P9910094-01-MSD	0.1	0.0975	98	75 - 125	1.4
Nickel	P10094i-LCS	1	0.985	99	85 - 115	
Nickel	P9910094-01-MS	1	0.987	99	75 - 125	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nickel	P9910094-01-MSD	1	0.979	98	75 - 125	0.8
Potassium	P10094i-LCS	20	19.9	99	85 - 115	
Potassium	P9910094-01-MS	20	20	100	75 - 125	
Potassium	P9910094-01-MSD	20	19.9	99	75 - 125	0.5
Silver	P10094i-LCS	0.5	0.501	100	85 - 115	
Silver	P9910094-01-MS	0.5	0.499	100	75 - 125	
Silver	P9910094-01-MSD	0.5	0.497	99	75 - 125	0.4
Sodium	P10094i-LCS	20	20.4	102	85 - 115	
Sodium	P9910094-01-MS	20	20.9	105	75 - 125	
Sodium	P9910094-01-MSD	20	20.6	103	75 - 125	1.4
Zinc	P10094i-LCS	0.5	0.49	98	85 - 115	
Zinc	P9910094-01-MS	0.5	0.495	99	75 - 125	
Zinc	P9910094-01-MSD	0.5	0.493	99	75 - 125	0.4

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 SUBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Mercury	P10099-Hg-LCS	0.005	0.00487	97	85 - 115	
Mercury	P9910099-01-MS	0.005	0.00449	90	70 - 130	
Mercury	P9910099-01-MSD	0.005	0.00451	90	70 - 130	0.4

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Silica	P10099Si-LCS	10	9.99	100	85 - 115	
Silica	P9910099-01-MS	5	32.6	52 C	75 - 125	
Silica	P9910099-01-MSD	5	32.04	41 C	75 - 125	24.1

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Arsenic	P10100M-LCS	0.01	0.0113	113	85 - 115	
Arsenic	P9910100-01-MS	0.01	0.016	98	75 - 125	
Arsenic	P9910100-01-MSD	0.01	0.0164	102	75 - 125	3.8
Lead	P10100M-LCS	0.005	0.00501	100	85 - 115	
Lead	P9910100-01-MS	0.005	0.00397	79	75 - 125	
Lead	P9910100-01-MSD	0.005	0.00422	84	75 - 125	6.1
Selenium	P10100M-LCS	0.01	0.0113	113	85 - 115	
Selenium	P9910100-01-MS	0.01	0.0141	84	75 - 125	
Selenium	P9910100-01-MSD	0.01	0.0153	96	75 - 125	13.3

ND - Not Detected

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PROJECT NUMBER		PROJECT NAME		DATE		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS						CONTRACT LABORATORY											
SAMPLES (Signature)		LAB ID		DATE		TIME		MATRIX		SAMPLE NUMBER		CATIONS + ANIONS		SPE		HEAVY METALS		BTX		PAH 8100		PAH 83100		REMARKS			
<i>John Smith</i>		01		10/18/05		1200		H2O		199.0206		10		X		X		X		X		X		X		<i>2200 BTX & PAH 8100</i>	
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME	
<i>John Smith</i>		10/18/05		1200		1200		1200		1200		1200		1200		1200		1200		1200		1200		1200		1200	
REQUESTED TURNAROUND TIME:		ROUTINE		RUSH		SAMPLE RECEIPT REMARKS		CHARGE CODE		RESULTS & INVOICES TO:		LABORATORY SERVICES		EL PASO NATURAL GAS COMPANY		8645 RAILROAD DRIVE		EL PASO, TEXAS 79904		915-758-2229		FAX: 915-759-2335		LABORATORY SERVICES		EL PASO NATURAL GAS COMPANY	
10/18/05		1200		1200		1200		1200		1200		1200		1200		1200		1200		1200		1200		1200		1200	
10/18/05		1200		1200		1200		1200		1200		1200		1200		1200		1200		1200		1200		1200		1200	

NEL LABORATORIES

Reno • Las Vegas
Phoenix • So. California

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P9910100

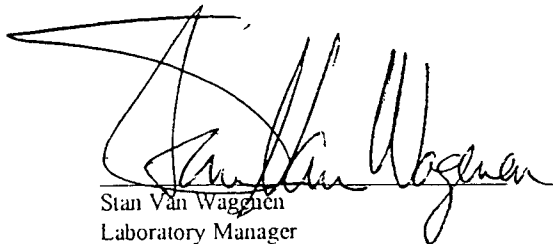
Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/26/99.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some QA results have been flagged as follows:

- C - Sample concentration is a least 5 times greater than spike contribution. Spike recovery criteria do not apply.


Stan Van Wageningen
Laboratory Manager

11/18/99
Date

CERTIFICATIONS.

	Reno	Las Vegas	S. California		Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605	Idaho	Certified	Certified	
California	1707	2002	2264	Montana	Certified	Certified	
US Army Corps of Engineers	Certified	Certified		Nevada	NV033	NV052	CA084
				L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M99-0207
DATE SAMPLED: 10/23/99
NEL SAMPLE ID: P9910100-01

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.059	0.025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Arsenic	0.0062	0.005 mg/L	5	EPA 200.8	10/29/99	10/30/99
Barium	0.092	0.0025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Boron	0.20	0.01 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Calcium	50	0.25 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Iron	0.89	0.05 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/29/99	10/30/99
Magnesium	13	0.25 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Manganese	0.058	0.0025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/28/99	10/28/99
Molybdenum	0.0083	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Potassium	4.4	1. mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Silica	20	10. mg/L	10	SM 4500Si-D	NA	11/10/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Sodium	80	0.25 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/29/99	10/30/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/28/99	10/29/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0208
DATE SAMPLED: 10/23/99
NEL SAMPLE ID: P9910100-02

TEST: AZ METALS PKG
MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Arsenic	ND	0.005 mg/L	5	EPA 200.8	10/29/99	10/30/99
Barium	ND	0.0025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Boron	ND	0.01 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Calcium	0.32	0.25 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Lead	ND	0.005 mg/L	5	EPA 200.8	10/29/99	10/30/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/28/99	10/28/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Silica	ND	1. mg/L	1	SM 4500Si-D	NA	11/10/99
Vanadium	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/29/99	10/30/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/28/99	10/29/99

F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0209
 DATE SAMPLED: 10/23/99
 NEL SAMPLE ID: P9910100-03

TEST: AZ METALS PKG
 MATRIX: Aqueous

ANALYST: JY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Arsenic	ND	0.005 mg/L	5	EPA 200.8	10/29/99	10/30/99
Barium	ND	0.0025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Boron	ND	0.01 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Calcium	0.33	0.25 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Lead	0.0062	0.005 mg/L	5	EPA 200.8	10/29/99	10/30/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/28/99	10/28/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Silica	ND	1. mg/L	1	SM 4500Si-D	NA	11/10/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/29/99	10/30/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/28/99	10/29/99

F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: AZ METALS PKG

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10099-Hg-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 245.1	10/28/99	10/28/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company

CLIENT ID: Method Blank

PROJECT ID: JAL #4

DATE SAMPLED: NA

JECT #: NA

NEL SAMPLE ID: P10099Si-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	NA	11/10/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10100i-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Aluminum	ND	0.025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Barium	ND	0.0025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Boron	ND	0.01 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Calcium	ND	0.25 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Chromium	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Cobalt	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Copper	ND	0.0025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Iron	ND	0.05 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Magnesium	ND	0.25 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Manganese	ND	0.0025 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Molybdenum	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Nickel	ND	0.02 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Potassium	ND	1. mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Silver	ND	0.005 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Sodium	ND	0.25 mg/L	0.5	EPA 200.7	10/28/99	10/29/99
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	10/28/99	10/29/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10100M-BLK

TEST: AZ METALS PKG

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Arsenic	ND	0.001 mg/L	1	EPA 200.8	10/29/99	10/30/99
Lead	ND	0.001 mg/L	1	EPA 200.8	10/29/99	10/30/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P10100M-U-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.005 mg/L	5	EPA 200.8	10/29/99	10/30/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0207
DATE SAMPLED: 10/23/99
NEL SAMPLE ID: P9910100-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	130			1	SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND			1	SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND			1	SM 2320 B	mg/L	11/1/99
Alkalinity, Total	130	25.		1	SM 2320 B	mg/L	11/1/99
Bromide	0.58	0.2		1	EPA 300.0	mg/L	11/4/99
Chloride	96	10.	100		EPA 300.0	mg/L	11/5/99
Fluoride	1.6	0.4		1	SM 4500-F C	mg/L	11/2/99
Hardness, Total (as CaCO ₃)	180	1.	0.5		EPA 200.7	mg/L	10/29/99
Nitrate/Nitrite as N, Total	ND	0.05		1	SM 4500-NO ₃ F	mg/L-N	11/4/99
pH	8.29	2.		1	EPA 150.1	pH Units	10/26/99
pH Temperature	21.4	1.		1	EPA 150.1	°C	10/26/99
Specific Conductance	640	1.		1	SM 2510 B	µS/cm	10/26/99
Sulfate	50	50.	100		EPA 300.0	mg/L	11/5/99
Total Dissolved Solids	367	15.		1	SM 2540 C	mg/L	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: M99-0208
 DATE SAMPLED: 10/23/99
 NEL SAMPLE ID: P9910100-02

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	REPORTING		D. F.	METHOD	UNITS	ANALYZED
		LIMIT					
Alkalinity - Bicarbonate	ND		1		SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND		1		SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND		1		SM 2320 B	mg/L	11/1/99
Alkalinity, Total	ND	25.	1		SM 2320 B	mg/L	11/1/99
Bromide	ND	0.2	1		EPA 300.0	mg/L	11/4/99
Chloride	0.32	0.1	1		EPA 300.0	mg/L	11/4/99
Fluoride	ND	0.4	1		SM 4500-F C	mg/L	11/2/99
Hardness, Total (as CaCO3)	ND	1.	0.5		EPA 200.7	mg/L	10/29/99
Nitrate/Nitrite as N, Total	0.088	0.05	1		SM 4500-NO3 F	mg/L-N	11/4/99
pH	6.03	2.	1		EPA 150.1	pH Units	10/26/99
pH Temperature	22.4	1.	1		EPA 150.1	°C	10/26/99
Specific Conductance	3.75	1.	1		SM 2510 B	µS/cm	10/26/99
Sulfate	ND	0.5	1		EPA 300.0	mg/L	11/4/99
Total Dissolved Solids	ND	15.	1		SM 2540 C	mg/L	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: M99-0209
DATE SAMPLED: 10/23/99
NEL SAMPLE ID: P9910100-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	REPORTING LIMIT	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity, Total	ND	25.	1	SM 2320 B	mg/L	11/1/99
Bromide	ND	0.2	1	EPA 300.0	mg/L	11/4/99
Chloride	0.32	0.1	1	EPA 300.0	mg/L	11/4/99
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	11/2/99
Hardness, Total (as CaCO ₃)	ND	1.	0.5	EPA 200.7	mg/L	10/29/99
Nitrate/Nitrite as N, Total	0.080	0.05	1	SM 4500-NO ₃ F	mg/L-N	11/4/99
pH	5.94	2.	1	EPA 150.1	pH Units	10/26/99
pH Temperature	21.7	1.	1	EPA 150.1	°C	10/26/99
Specific Conductance	3.70	1.	1	SM 2510 B	µS/cm	10/26/99
Sulfate	ND	0.5	1	EPA 300.0	mg/L	11/4/99
Total Dissolved Solids	ND	15.	1	SM 2540 C	mg/L	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company

CLIENT ID: Method Blank

PROJECT ID: JAL #4

DATE SAMPLED: NA

OBJECT #: NA

NEL SAMPLE ID: 991027TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991101ALK-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Carbonate	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity - Hydroxide	ND		1	SM 2320 B	mg/L	11/1/99
Alkalinity, Total	ND	25	1	SM 2320 B	mg/L	11/1/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991102F-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	11/2/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991104IC-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	11/4/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/4/99
Sulfate	ND	0.5	1	EPA 300.0	mg/L	11/4/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company

PROJECT ID: JAL #4

JECT #: NA

TEST: Non-Metals

CLIENT ID: Method Blank

DATE SAMPLED: NA

NEL SAMPLE ID: 991104NO2NO3C1-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate/Nitrite as N, Total	ND	0.05	1	SM 4500-NO3 F	mg/L-N	11/4/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991105IC-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/5/99
Sulfate	ND	0.5	1	EPA 300.0	mg/L	11/5/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0207
DATE SAMPLED: 10/23/99
NEL SAMPLE ID: P9910100-01

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: BJV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 11/5/99

DILUTION: 1

ANALYZED: 11/5/99

PARAMETER	Result	Reporting Limit
Benzene	ND	2. µg/L
Toluene	7.4 µg/L	2. µg/L
Ethylbenzene	2.6 µg/L	2. µg/L
Total Xylenes	4.4 µg/L	4. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	99	86 - 115
Toluene-d8	107	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M99-0208
DATE SAMPLED: 10/23/99
NEL SAMPLE ID: P9910100-02

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: BJV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 11/5/99

DILUTION: 1

ANALYZED: 11/5/99

PARAMETER	Result	Reporting Limit
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	100	86 - 115
Toluene-d8	108	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: M99-0209
DATE SAMPLED: 10/23/99
NEL SAMPLE ID: P9910100-03

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: BJV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 11/5/99

DILUTION: 1

ANALYZED: 11/5/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	95	86 - 115
Toluene-d8	105	88 - 110

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991105BX60-BLK

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
METHOD: EPA 8260B
MATRIX: Aqueous
ANALYST: BJV - Las Vegas Division
EXTRACTED: 11/5/99
ANALYZED: 11/5/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	93	86 - 115
Toluene-d8	105	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	991026COND2-LCS	1412	1400	99	95 - 105	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	991026PH-LCS	7	7.001	100	99 - 101	
7.00 Buffer	991026PH-LCSD	7	7.02	100	99 - 101	0.3

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	991027TDS-LCS	1000	974	97	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	991101ALK-LCS	125	124	99	85 - 115	
Alkalinity, Total	991101ALK-LCSD	125	122	98	85 - 115	1.6

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Drinking Water

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	991102F-LCS	1	1.06	106	85 - 115	
Fluoride	L9910286-01-MS	1	0.939	94	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	991104IC-LCS	100	102	102	90 - 110	
Chloride	991104IC-LCSD	100	101	101	90 - 110	1.
Chloride	P9910092-02-MS	100	7696	96	80 - 120	
Bromide	991104IC-LCS	100	104	104	90 - 110	
Bromide	991104IC-LCSD	100	104	104	90 - 110	0.
Bromide	P9910092-02-MS	100	105	105	80 - 120	
Sulfate	991104IC-LCS	100	104	104	90 - 110	
Sulfate	991104IC-LCSD	100	102	102	90 - 110	1.9
Sulfate	P9910092-02-MS	100	117	92	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
OBJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate/Nitrite as N, Total	991104NO2NO3C1-LCS	0.5	0.5151	103	90 - 110	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	991105BX60-LCS	20	20	100	80 - 120	
Benzene	P9910100-01-MS	20	23	115	76 - 127	
Benzene	P9910100-01-MSD	20	23	115	76 - 127	0.
Toluene	991105BX60-LCS	20	21	105	80 - 120	
Toluene	P9910100-01-MS	20	30	113	76 - 125	
Toluene	P9910100-01-MSD	20	30	113	76 - 125	0.
Ethylbenzene	991105BX60-LCS	20	20	100	80 - 120	
Ethylbenzene	P9910100-01-MS	20	24	107	70 - 130	
Ethylbenzene	P9910100-01-MSD	20	24	107	70 - 130	0.
Total Xylenes	991105BX60-LCS	60	61	102	80 - 120	
Total Xylenes	P9910100-01-MS	60	73	114	70 - 130	
Total Xylenes	P9910100-01-MSD	60	72	113	70 - 130	1.5

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	991105IC-LCS	100	101	101	90 - 110	
Chloride	991105IC-LCSD	100	100	100	90 - 110	1.
Chloride	R9910094-01-MS	100	98	97	80 - 120	
Sulfate	991105IC-LCS	100	101	101	90 - 110	
Sulfate	991105IC-LCSD	100	102	102	90 - 110	1.
Sulfate	R9910094-01-MS	100	87	85	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Mercury	P10099-Hg-LCS	0.005	0.00487	97	85 - 115	
Mercury	P9910099-01-MS	0.005	0.00449	90	70 - 130	
Mercury	P9910099-01-MSD	0.005	0.00451	90	70 - 130	0.4

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 SUBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Silica	P10099Si-LCS	10	9.99	100	85 - 115	
Silica	P9910099-01-MS	5	32.6	52 C	75 - 125	
Silica	P9910099-01-MSD	5	32.04	41 C	75 - 125	24.1

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Aluminum	P10100i-LCS	1	0.961	96	85 - 115	
Aluminum	P9910100-01-MS	1	1.03	97	75 - 125	
Aluminum	P9910100-01-MSD	1	1.06	100	75 - 125	3.
Barium	P10100i-LCS	1	0.972	97	85 - 115	
Barium	P9910100-01-MS	1	1.07	98	75 - 125	
Barium	P9910100-01-MSD	1	1.08	99	75 - 125	1.
Boron	P10100i-LCS	1	0.991	99	85 - 115	
Boron	P9910100-01-MS	1	1.19	99	75 - 125	
Boron	P9910100-01-MSD	1	1.21	101	75 - 125	2.
Cadmium	P10100i-LCS	0.2	0.198	99	85 - 115	
Cadmium	P9910100-01-MS	0.2	0.199	100	75 - 125	
Cadmium	P9910100-01-MSD	0.2	0.199	100	75 - 125	0.
Calcium	P10100i-LCS	20	21.2	106	85 - 115	
Calcium	P9910100-01-MS	20	69.1	95	75 - 125	
Calcium	P9910100-01-MSD	20	69.4	97	75 - 125	1.6
Chromium	P10100i-LCS	0.5	0.512	102	85 - 115	
Chromium	P9910100-01-MS	0.5	0.498	100	75 - 125	
Chromium	P9910100-01-MSD	0.5	0.501	100	75 - 125	0.6
Cobalt	P10100i-LCS	0.5	0.506	101	85 - 115	
Cobalt	P9910100-01-MS	0.5	0.489	98	75 - 125	
Cobalt	P9910100-01-MSD	0.5	0.49	98	75 - 125	0.2
Copper	P10100i-LCS	0.5	0.473	95	85 - 115	
Copper	P9910100-01-MS	0.5	0.482	96	75 - 125	
Copper	P9910100-01-MSD	0.5	0.489	98	75 - 125	1.4
Iron	P10100i-LCS	1	1.02	102	85 - 115	
Iron	P9910100-01-MS	1	1.82	93	75 - 125	
Iron	P9910100-01-MSD	1	1.83	94	75 - 125	1.1
Magnesium	P10100i-LCS	20	19.7	99	85 - 115	
Magnesium	P9910100-01-MS	20	33	100	75 - 125	
Magnesium	P9910100-01-MSD	20	33.3	101	75 - 125	1.5
Manganese	P10100i-LCS	0.5	0.502	100	85 - 115	
Manganese	P9910100-01-MS	0.5	0.543	97	75 - 125	
Manganese	P9910100-01-MSD	0.5	0.547	98	75 - 125	0.8
Molybdenum	P10100i-LCS	0.1	0.0988	99	85 - 115	
Molybdenum	P9910100-01-MS	0.1	0.104	96	75 - 125	
Molybdenum	P9910100-01-MSD	0.1	0.105	97	75 - 125	1.
Nickel	P10100i-LCS	1	1.03	103	85 - 115	
Nickel	P9910100-01-MS	1	0.985	99	75 - 125	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nickel	P9910100-01-MSD	1	0.989	99	75 - 125	0.4
Potassium	P10100i-LCS	20	19.6	98	85 - 115	
Potassium	P9910100-01-MS	20	24.8	102	75 - 125	
Potassium	P9910100-01-MSD	20	25	103	75 - 125	1.
Silver	P10100i-LCS	0.5	0.468	94	85 - 115	
Silver	P9910100-01-MS	0.5	0.465	93	75 - 125	
Silver	P9910100-01-MSD	0.5	0.469	94	75 - 125	0.9
Sodium	P10100i-LCS	20	19.6	98	85 - 115	
Sodium	P9910100-01-MS	20	101	105	75 - 125	
Sodium	P9910100-01-MSD	20	102	110	75 - 125	4.7
Zinc	P10100i-LCS	0.5	0.502	100	85 - 115	
Zinc	P9910100-01-MS	0.5	0.502	100	75 - 125	
Zinc	P9910100-01-MSD	0.5	0.508	102	75 - 125	1.2

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Arsenic	P10100M-LCS	0.01	0.0113	113	85 - 115	
Arsenic	P9910100-01-MS	0.01	0.016	98	75 - 125	
Arsenic	P9910100-01-MSD	0.01	0.0164	102	75 - 125	3.8
Lead	P10100M-LCS	0.005	0.00501	100	85 - 115	
Lead	P9910100-01-MS	0.005	0.00397	79	75 - 125	
Lead	P9910100-01-MSD	0.005	0.00422	84	75 - 125	6.1
Selenium	P10100M-LCS	0.01	0.0113	113	85 - 115	
Selenium	P9910100-01-MS	0.01	0.0141	84	75 - 125	
Selenium	P9910100-01-MSD	0.01	0.0153	96	75 - 125	13.3

ND - Not Detected

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PROJECT NUMBER		PROJECT NAME		DATE		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS		CONTRACT LABORATORY	
SAMPLERS (Signature)		DATE		DATE		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS		CONTRACT LABORATORY	
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER									
01	10/31/99	1030	H ₂ O	199-0807			5		X	X	X	X	
02	10/31/99	1040	H ₂ O	199-0808			5		X	X	X	X	
03	10/31/99	1300	H ₂ O	199-0809			5		X	X	X	X	
RELINQUISHED BY: (Signature) <i>[Signature]</i> DATE/TIME 10/31/99 1200 RECEIVED BY: (Signature) <i>[Signature]</i> DATE/TIME 10/31/99 1200 RELINQUISHED BY: (Signature) <i>[Signature]</i> DATE/TIME 10/31/99 1200 RECEIVED BY: (Signature) <i>[Signature]</i> DATE/TIME 10/31/99 1200 REQUESTED TURNAROUND TIME: ☐ ROUTINE ☐ RUSH CARRIER CO. <i>[Blank]</i> SAMPLE RECEIPT REMARKS <i>[Blank]</i> BILL NO. <i>[Blank]</i> CHARGE CODE <i>[Blank]</i> LABORATORY SERVICES: EL PASO NATURAL GAS COMPANY 8645 RAILROAD DRIVE EL PASO, TEXAS 79904 915-759-2229 FAX: 915-759-2335													

White - Testing 'story Canary - EPNG Lab Pink - Field Sampler

NEL LABORATORIES

Reno • Las Vegas
Phoenix • So. California

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

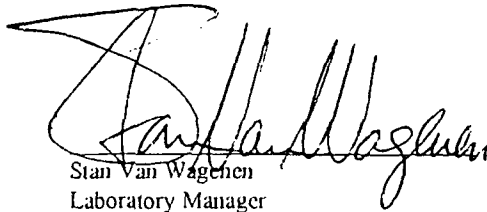
PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P9910101

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/26/99.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stan Van Wageningen
Laboratory Manager

11/5/99
Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA

CLIENT ID: M99-0210
 DATE SAMPLED: 10/23/99
 NEL SAMPLE ID: P9910101-01

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	2.5	0.1	1	EPA 300.0	mg/L	11/4/99
Specific Conductance	891	1.	1	SM 2510 B	µS/cm	10/26/99
Total Dissolved Solids	540	25.	1	SM 2540 C	mg/L	10/27/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991027TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	25	1	SM 2540 C	mg/L	10/27/99

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 991104IC-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	11/4/99
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/4/99
Sulfate	ND	0.1	1	EPA 300.0	mg/L	11/4/99

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA

CLIENT ID: M99-0210
 DATE SAMPLED: 10/23/99
 NEL SAMPLE ID: P9910101-01

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 METHOD: EPA 8260B ANALYST: SKV - Las Vegas Division
 MATRIX: Aqueous EXTRACTED: 10/29/99
 DILUTION: 1 ANALYZED: 10/29/99

PARAMETER	Result	Reporting Limit
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	98	86 - 115
Toluene-d8	104	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 991029BX60-BLK

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SKV - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: 10/29/99

ANALYZED: 10/29/99

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	88	86 - 115
Toluene-d8	100	88 - 110

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	991026COND2-LCS	1412	1400	99	95 - 105	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
JECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	991027TDS-LCS	1000	974	97	80 - 120	

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	991029BX60-LCS	20	21	105	80 - 120	
Benzene	P9910088-05-MS	20	23	115	76 - 127	
Benzene	P9910088-05-MSD	20	23	115	76 - 127	0.
Toluene	991029BX60-LCS	20	21	105	80 - 120	
Toluene	P9910088-05-MS	20	23	115	76 - 125	
Toluene	P9910088-05-MSD	20	22	110	76 - 125	4.4
Ethylbenzene	991029BX60-LCS	20	20	100	80 - 120	
Ethylbenzene	P9910088-05-MS	20	21	105	70 - 130	
Ethylbenzene	P9910088-05-MSD	20	21	105	70 - 130	0.
Total Xylenes	991029BX60-LCS	60	62	103	80 - 120	
Total Xylenes	P9910088-05-MS	60	64	107	70 - 130	
Total Xylenes	P9910088-05-MSD	60	63	105	70 - 130	1.6

ND - Not Detected

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NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 OBJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	991104IC-LCS	100	102	102	90 - 110	
Chloride	991104IC-LCSD	100	101	101	90 - 110	1.
Chloride	P9910092-02-MS	100	7696	96	80 - 120	
Bromide	991104IC-LCS	100	104	104	90 - 110	
Bromide	991104IC-LCSD	100	104	104	90 - 110	0.
Bromide	P9910092-02-MS	100	105	105	80 - 120	
Sulfate	991104IC-LCS	100	104	104	90 - 110	
Sulfate	991104IC-LCSD	100	102	102	90 - 110	1.9
Sulfate	P9910092-02-MS	100	117	92	80 - 120	

ND - Not Detected

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CHAIN OF CUSTODY RECORD

9910101
Date 11/2

PROJECT NUMBER		PROJECT NAME		DATE		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS				CONTRACT LABORATORY							
SAMPLES (Signature)		LAB ID		DATE		TIME		MATRIX		SAMPLE NUMBER		C		TDS		SP		BTEX		REMARKS	
1013199		21		10/31/99		1200		M99-0810		3		X		X		X		X		8260 BTEX per client's	
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)	
10/31/99 1200		10/31/99 1200		10/31/99 1200		10/31/99 1200		10/31/99 1200		10/31/99 1200		10/31/99 1200		10/31/99 1200		10/31/99 1200		10/31/99 1200		10/31/99 1200	
REQUESTED TURNAROUND TIME:		ROUTINE		RUSH		SAMPLE RECEIPT REMARKS		RESULTS & INVOICES TO:		LABORATORY SERVICES		EL PASO NATURAL GAS COMPANY		8645 RAILROAD DRIVE		EL PASO, TEXAS 79904		915-759-2229		FAX: 915-759-2335	
CARRIER CO:		BILL NO:		CHARGE CODE		LABORATORY SERVICES		EL PASO NATURAL GAS COMPANY		8645 RAILROAD DRIVE		EL PASO, TEXAS 79904		915-759-2229		FAX: 915-759-2335		10/26/99		10/26/99	

White - Testing Lat ry Canary - EPNG Lab Pink - Field Sampler